

5. SDPS Release B Test Procedures

5.1 Phase 1 Test Procedures

5.1.1 Data Server Subsystem

Due to recent design changes, these procedures are not available.

5.1.1.1 Document Server Processing Thread (T209-10.01)

5.1.1.2 Media Distribution I Thread (T209-20.01)

5.1.1.3 Data Distribution I Thread (T209-30.01)

5.1.2 Ingest Subsystem

5.1.2.1 Request Cancellation and Suspension Thread (T212-10.01)

5.1.2.1.1 Test Case 1: Operational Ingest Suspension Request Test (T212-10.01.01)

Step No.	Test Steps	Expected Results	Comments	Pass/Fail
1.	Login to the Ingest workstation: > <username> > <password>	Login using an account without Suspend permissions.		
2.	Open an xterm window and use the xterm to start Ingest process(es) if they are not currently running			
3.	Open a second xterm window and invoke the initial ECS Ingest GUI using this xterm.			
4.	Using the initial ECS Ingest GUI, invoke the Operator Tools GUI: > click Operator Tools			
5.	From the Ingest xterm, create an Ingest Session	The session must be created.		
6.	On the Ingest Driver xterm, send a series of DANs > /usr/testb/testdata/<filename>	DANs must be transmitted.		

7.	Invoke the Monitor/Control GUI to monitor request processing.	Note the Request Ids of ongoing Requests.		
8.	Before session processing completes, invoke the Operator Tools GUI.			
9.	Use the Operator Tools GUI to attempt to suspend several (not all) of the Ingest Requests	An error message must be displayed to the screen indicating unable to suspend requests for an invalid user.		
10.	Open another xterm window and use this window to view the Error Log: > more <Error Log File> or > vi <Error Log File>	The Error log must contain a message indicating an attempt to Suspend was made by an unauthorized user.		
11.	View the History Log to verify that the remaining Ingest Requests are successful: > more <History Log File> or > vi <History Log File>	The history log must show that all Requests were successful.		
12.	Exit all Ingest GUI processes.			
13.	Terminate all Ingest Processes and exit the Ingest workstation.	Note: A valid user must be checked.		
14.	Login to the Ingest Workstation: > <username> > <password>	Login using an account with permission to cancel requests.		
15.	Repeat steps 2-4.			

16.	Attempt to Suspend a Request.	An error message must appear stating that there are no active requests to Suspend.		
17.	Open an xterm window and use it to view the Error Log: > more <Error Log File> or > vi <Error Log File>	The Error log must contain messages indicating that an attempt was made to suspend an Ingest Request when none were active.		
18.	Repeat steps 5-8			
19.	Select a Suspend Request for an Invalid Request Identifier.	An error message must appear stating that request Identifier is invalid.		
20.	Open an xterm window and use it to view the Error Log: > more <Error Log File> or > vi <Error Log File>	The Error log must contain messages indicating that an attempt was made to suspend an Ingest Request using an Invalid Request Identifier.		
21.	Select a Suspend Request for a Valid Request Identifier.			
22.	Check the history log to verify the Ingest Request suspended. > more <History Log File> or > vi <History Log File>	The Ingest Request must be labeled as suspended. No further processing must be performed for that specific Ingest Request.		
23.	Repeat Step 19 for the same Request Identifier.	An error message must be displayed stating that the Ingest Request is already Suspended.		
24.	Open an xterm window and use it to view the Error Log:	The Error log must contain messages indicating that an attempt was made to suspend an already suspended Ingest		

	> more <Error Log File> or > vi <Error Log File>	Request.		
25.	Verifying Suspend functionality: Prior to Ingest Request processing completion, invoke the Operator Tools GUI.			
26.	Using Control GUI, suspend all Ingest Requests from a single External Data Provider.	The Request State for the specified External Data Provider in the Monitor/ Control GUI must indicate “Suspend”		
27.	Check the history log to verify the user specified Ingest Requests are suspended. > more <History Log File> or > vi <History Log File>	The Ingest Requests must be labeled as suspended. No further processing must be performed for those specific Ingest Requests.		
28.	Perform an “ls -l” in the archive directory.	Suspended Ingest Requests must not be placed in the archive.		
29.	Using Control GUI, suspend all of the processing Ingest Requests.	The Request State in the Monitor/ Control GUI must indicate all Ingest Requests are “Suspended”.		
30.	Check the history log to verify the all Ingest Requests are suspended. > more <History Log File> or > vi <History Log File>	The Ingest Requests must be labeled as Suspended. No further processing must be performed for that specific Ingest Requests.		
31	. Perform an “ls -l” in the archive directory.	Suspended Ingest Requests must not be placed in the archive.		

32.	Exit all Ingest GUI Processes and exit the Ingest workstation.			
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5.1.2.1.2 Test Case 2: Application Ingest Suspension Request Test (T212-10.01.02)

Step No.	Test Steps	Expected Results	Comments	Pass/Fail
1.	Login to the Ingest workstation: > <username> > <password>	Login using an account without Suspend permissions.		
2.	Open an xterm window and use the xterm to start Ingest process(es) if they are not currently running			
3.	Open a second xterm window and invoke the initial ECS Ingest GUI using this xterm.			
4.	Using the initial ECS Ingest GUI, invoke the Operator Tools GUI: > click Operator Tools			
5.	From the Ingest xterm, create an Ingest Session	The session must be created.		
6.	On the Ingest Driver xterm, send a series of DANs > /usr/testb/testdata/<filename>	DANs must be transmitted. Several DANs must be transmitted from the same External Data Source.		
7.	Invoke the Monitor/Control GUI to monitor request processing.	Note the Request IDs of ongoing Requests.		
8.	Before session processing completes,			

	invoke the Operator Tools GUI.			
9.	Use the Operator Tools GUI to attempt to suspend several (not all) of the Ingest Requests	An error message must be displayed to the screen indicating unable to suspend requests for an invalid application request.		
10.	Open another xterm window and use this window to view the Error Log: > more <Error Log File> or > vi <Error Log File>	The Error log must contain a message indicating an attempt to Suspend was made by an unauthorized application.		
11.	View the History Log to verify that the remaining Ingest Requests are successful: > more <History Log File> or > vi <History Log File>	The history log must show that all Requests were successful.		
12.	Exit all Ingest GUI processes.			
13.	Terminate all Ingest Processes and exit the Ingest workstation.	Note: A valid user must be checked.		
14.	Login to the Ingest Workstation: > <username> > <password>	Login using an account with permission to cancel requests.		
15.	Repeat steps 2-4.			
16.	Attempt to Suspend a Request.	An error message must appear stating that there are no active requests to Suspend.		
17.	Open an xterm window and use it to view the Error Log:	The Error log must contain messages indicating that an application attempt was made to suspend an Ingest Request when		

	> more <Error Log File> or > vi <Error Log File>	none were active.		
18.	Repeat steps 5-8			
19.	Select a Suspend Request for an Invalid Request Identifier.	An error message must appear stating that request Identifier is invalid.		
20.	Open an xterm window and use it to view the Error Log: > more <Error Log File> or > vi <Error Log File>	The Error log must contain messages indicating that an application attempt was made to suspend an Ingest Request using an Invalid Request Identifier.		
21.	Select a Suspend Request for a Valid Request Identifier.			
22.	Check the history log to verify the Ingest Request suspended. > more <History Log File> or > vi <History Log File>	The Ingest Request must be labeled as suspended. No further processing must be performed for that specific Ingest Request.		
23.	Repeat Step 19 for the same Request Identifier.	An error message must be displayed stating that the Ingest Request is already Suspended.		
24.	Open an xterm window and use it to view the Error Log: > more <Error Log File> or > vi <Error Log File>	The Error log must contain messages indicating that an application attempt was made to suspend an already suspended Ingest Request.		
25.	Verifying Suspend functionality: Prior to Ingest Request processing completion, invoke the Operator Tools			

	GUI.			
26.	Using Control GUI, suspend all Ingest Requests from a specific External Data Provider.	The Request State for the application selected External Data Provider in the Monitor/ Control GUI must indicate “Suspend”.		
27.	Check the history log to verify the user specified Ingest Requests are suspended. > more <History Log File> or > vi <History Log File>	The Ingest Requests must be labeled as suspended. No further processing must be performed for those specific Ingest Requests.		
28.	Perform an “ls -l” in the archive directory.	Suspended Ingest Requests must not be placed in the archive.		
29.	Using Control GUI, suspend all of the processing Ingest Requests.	The Request State in the Monitor/ Control GUI must indicate all Ingest Requests are “Suspended”.		
30.	Check the history log to verify the all Ingest Requests are suspended. > more <History Log File> or > vi <History Log File>	The Ingest Requests must be labeled as Suspended. No further processing must be performed for that specific Ingest Requests.		
31.	Perform an “ls -l” in the archive directory.	Suspended Ingest Requests must not be placed in the archive.		
32.	Exit all Ingest GUI Processes and exit the Ingest workstation.			

5.1.2.2 Electronic and Media Ingest Thread (T212-20.01)

5.1.2.2.1 Test Case 1: EDC Landsat IAS and LPS FTP Test (T212-20.01.01)

Step No.	Test Steps	Expected Results	Comments	Pass/Fail
1				
2	(The LPS Interface (real or simulated) initiates an invalid application program-to-applications TCP/IP connection with Ingest.) LPS sends an Invalid Authentication Request to Ingest (to verify user privileges).			
3	Ingest verifies the users privilege and returns an Authentication Response back LPS documenting the invalid request.	A TBD method is used to inform LPS that an Invalid request was made. The TCP connection must be broken.		
4	The controller attempts to transmit queued messages .	An error must appear stating that the controller is not authorized.		
5	(The LPS Interface (real or simulated) initiates a valid application program-to-applications TCP/IP connection with Ingest.) LPS sends a valid Authentication Request to Ingest (to verify user privileges).			
6	Ingest verifies the users privilege and	The TCP connection must remain open.		

	returns an Authentication Response back LPS documenting the valid request.	A TBD authentication message must be sent to LPS.		
7	LPS interface sends a Data Availability Notice (DAN) to Ingest via the Gateway. (Note: the DAN must be in PVL format.)	The DAN must contain the following information: locations where data can be pulled and a list of granules (files) buffered for retrieval.)		
8	Ingest automatically sends a Data Availability Acknowledgment (DAA) to LPS to acknowledge that a DAN has been received and to provide information on any DAN errors.			
9	Upon receipt of all DANs and corresponding DAAs, LPS terminates the TCP connection(s).	Each DAN must have a corresponding DAA.		
10	Ingest initiates an ftp of LPS LOR data (format 1 and format 2), associated metadata and LOR Scene Browse data via the following (the Gateway is not used): > cd <to TBD Ingest staging directory for LPS data> > ftp <TBD LPS Server Name> > mget <filename> > bye or >quit	File sizes must be checked against the DAN information.		
11	Ingest must automatically check the “ftped” data against the DAN information and must transfer, ingest and archive the data.			

12	Prior to Ingest sending a Data Delivery Notice (DDN) to LPS, Ingest sends LPS (via the Gateway) an Authentication Request.			
13	LPS must check the Authentication Request. LPS returns the Authentication Response.	The DDN must not be sent until successful completion of the authentication process.		
14	Upon receipt of the Authentication Response, Ingest must automatically send the DDN to LPS to notify LPS that the data has been transferred, ingested and archived.	The DDN must identify data ftp success or discrepancies (i.e. Data did not match the DAN information).		
15	After the DDN has be sent, the LPS must transmit a Data Delivery Acknowledgment (DDA) to Ingest to inform Ingest that the DDN has be received.	Each DAA must have a corresponding DDN.		
16	Ingest automatically terminates the LPS connection upon receipt of the final DDA.			
17	Repeat sets 5-16 until sufficient LPS data has been Ingested (Format 1, Format 2, metadata, and browse data). The LPS LOR data should correspond to test data used to verify Ingesting the IAS calibration coefficient data ingest.			
18	Perform an “ls -l” in the TBD staging directory where the data is archived.	All archived LPS data must reside in the staging directory.		
19	IAS Ingest:			

	The IAS simulator must access the ECS Ingest GUI via the Internet.			
20	IAS must use the ECS Ingest GUI to complete an ECS network ingest request form which creates a standard PVL Delivery Record.	The standard Delivery Record for IAS serves as a DAN for Ingesting IAS-provided data.		
21	Using HTTP, submit the Delivery Record to Ingest.	The Ingest GUI interface must display the ingest acknowledgment of the DAN receipt and notification of Ingest completion.		
22	<p>The following steps must be used to transfer the IAS calibration coefficients and metadata to Ingest:</p> <p>> ftp <TBD Ingest server name></p> <p>> cd <TBD ECS staging directory for IAS data></p> <p>> put <filename></p> <p>> bye or >quit</p>	(Data Note: The calibration coefficients must apply to many sets of Landsat 7 LOR data. A single file applies to both Format 1 and Format 2 file groups relating to the same subinterval.)		
23	After the IAS ftp, IAS transmits an Ingest Request by sending the IAS Delivery Record to Ingest.			
24	Ingest uses the IAS Delivery record to ingests data onto Ingest staging disk. Perform an “ ls -l ” to ensure IAS data resides on the staging disk.			

25	<p>Ingest must send a message back to the IAS interface to inform IAS:</p> <ul style="list-style-type: none"> - DAN has been received - Calibration Coefficient data and metadata are ingested 	<p>The IAS ECS Ingest GUI must displays the acknowledgment of DAN receipt and the notification of ingest completion.</p>		
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5.1.2.2.2 Test Case 2: GSFC and LaRC EDOS Media Ingest Test (T212-20.01.02)

	Test Steps	Expected Results	Comments	Pass/ Fail
1.	<p>Initialized the Ingest subsystem to accept and archive data from an external source.</p> <p>> <user name></p> <p>> <Password></p>	Login must permit user to Ingest data.		
2.	The interface between Ingest and EDOS is established to initiate the Ingest Request. (How this is accomplished -via e-mail, automatically, etc... is TBD).	A sample of each PDS (MODIS, MOPITT, MISR, CERES) in various data levels (L1-L4) must be tested for data ingest processing.		
3.	Once TBD magnetic tape is received, place tape into tape drive.	The data on the TBD magnetic tape must be as specified in Table 8.1.3.1-5 in the EDOS/EGS ICD in TBD format.		
4.	The Ingest operator initiates the ASTER GDS 3D cartridge tape ingest by selecting the TBD option on the Ingest display.	The TBD magnetic tape must begin reading. Check the tape drive for activity.		
5.	Upon completion of Ingesting data onto the staging disk, verify the granule file resides on the staging disk. Perform an “ls -l” in the staging disk directory.	The granule file must reside on the staging disk.		
6.	Ingest must automatically check the granule file to verify that a valid Delivery Record is delivered with the Granule.	(It is assumed that the information in the Physical Media Unit Delivery Letter is compared to the Delivery Record information which resides on the tape.		

		This is TBD.)		
7.	For Delivery Record errors, the user must be informed if there is a problem with the Delivery Record and the granules.	Data must not be ingested. Perform a “ls -l” in the TBD directory to ensure that data granules are not archived.		
8.	For valid Delivery Records, Ingest must archive the data in the granule file delivered. Execute a “ls -l” UNIX command to verify that data is archived. The Directory is TBD.	The data must reside in the TBD directory.		
9.	Repeat Steps 2-8 until a full sampling of MISR, MODIS, MOPITT, and CERES data has been ingesting.			

5.1.2.2.3 Test Case 3: EDC ASTER GDS Media Ingest Test (T212-20.01.03)

	Test Steps	Expected Results	Comments	Pass/ Fail
1.	ASTER GDS Media Ingest: Initialized the Ingest subsystem to accept and archive data from media. > <user name> > <Password>	Login must permit user to ingest data.		
2.	The ASTER GDS simulator transmits a Data Shipping Notice to the Ingest operator using e-mail . (Note: Operationally, the Data Shipping Notices will be sent several days prior to the arrival of the Level 1 granules.)	The Ingest Operator must receive the Data Shipping Notice. The Data Shipping Notice Format is TBD. The Data Shipping Notice must identify granule-level information for Level 1 scenes being shipped.		
3.	Once 3D cartridge is received, place tape into 3D cartridge drive.	Note: The data on the 3D cartridge must be: L1a and L1b data products, associate metadata, ancillary data, and browse data. The L1a and L1b data must be in HDF-EOS format.		
4.	The Ingest operator initiates the ASTER GDS 3D cartridge tape ingest by selecting the TBD option on the Ingest display.	The 3D cartridge tape must begin reading. Check the tape drive for activity.		
5.	Upon completion of Ingesting data onto the staging disk, verify the granule file resides on the staging disk. Perform an “ls	The granule file must reside on the staging disk.		

	-l” in the staging disk directory.			
6.	Ingest must automatically check the granule file to verify that a valid Physical Media DAN is delivered with the Granule.	(It is assumed that the information in the Physical media DAN is compared to the Data Shipping Notice information. This is TBD.)		
7.	For DAN errors, the user must be informed if there is a problem with the DAN and the granules.	Data must not be ingested. Perform a “ls -l” in the TBD directory to ensure that data granules are not archived.		
8.	For valid DANs, Ingest must archive the data in the granule file delivered. Execute a “ls -l” UNIX command to verify that data is archived. The Directory is TBD.	The data must reside in the TBD directory.		

5.1.2.2.4 Test Case 4: EDC Landsat 7 IGS Test (T212-20.01.04)

Step No.	Test Steps	Expected Results	Comments	Pass/Fail
1.	<p>Initialized the Ingest subsystem to accept and archive data from 8mm tape.</p> <p>> <user name></p> <p>> <Password></p>	Login must permit user to ingest data.		
2.	The Landsat7 tape supplier must provide Ingest with an 8mm tape to ingest data (at least one for Metadata and one for browse data).			
3.	Once 8mm tape is received, place tape into 8mm tape. drive.			
4.	The Ingest operator initiates the IGS 8mm tape ingest by selecting the TBD option on the Ingest display.	The IGS 8mm tape must begin reading. Check the tape drive for activity.		
5.	Upon completion of Ingesting data onto the staging disk, verify the granule file resides on the staging disk. Perform an “ls -l” in the staging disk directory.	The granule file must reside on the staging disk.		
6.	Ingest must automatically check the granule file to verify that a valid Physical Media Delivery Record is delivered with the tape. (The Delivery Record may reside as a file with the delivery tape or	(It is assumed that the information in the Physical Media Delivery Record is compared to the data delivered on the delivery tape. This is TBD.)		

	may be in hardcopy form.			
7.	For Delivery Record errors, the user must be informed if there is a problem with the Delivery Record and/or the granules.	Data must not be ingested. Perform a “ls -l” in the TBD directory to ensure that data granules are not archived.		
8.	For valid Delivery Record, Ingest must archive the data in the granule file delivered. Execute a “ls -l” UNIX command to verify that data is archived. The Directory is TBD.	The data must reside in the TBD directory.		
9.	Repeat Steps 3-8 to verify that at least two samples of Browse data and two samples of Metadata are able to be ingested.			

5.1.2.2.5 Test Case 5: EDOS Expedited Data Type Determination Test (T212-20.01.05)

Step No.	Test Steps	Expected Results	Comments	Pass/Fail
1.	Login to the Ingest Client workstation. > <user name> > <Password>			
2.	On the Ingest Client workstation startup the Ingest GUI, select the Monitor/Control function and then enter the appropriate information to monitor Ingest Requests from EDOS.			
3.	On the Ingest Client workstation start the EDOS polling process.			
4.	Login to the EDOS Client workstation (real or simulated) that is designated to interface with the ECS DAACs. > <user name> > <Password>			
5.	On the EDOS Client workstation place a DR corresponding to an expedited data type into the agreed upon poll location.			
6.	On the Ingest GUI, verify that the Ingest subsystem identified the data type of the expedited data corresponding to the DR.	The Ingest subsystem has identified the correct data type for the expedited data.		

7.	On the Ingest Client workstation, upon completion of ingest of the expedited data, verify the granule file(s) reside on the staging disk. Perform an “ls -l” in the staging disk directory.	The granule file must reside on the staging disk.		
8.	Repeat steps 4 through 6 for all expedited data types.			
9.	On the EDOS Client workstation remove the DR from the poll location.			
10.	Logoff the EDOS Client workstation.			
11.	Exit from the Ingest GUI.			
12.	Logoff the Ingest Client workstation.			

5.1.2.3 Modal Operational Thread (T212.30.01)

5.1.2.3.1 Test Case 1: Ingest Off-line Mode Test (T212-30.01.01)

Step No.	Test Steps	Expected Results	Comments	Pass/Fail
1.	Login to the Primary Ingest Client workstation. > <user name> > <Password>			
2.	On the Primary Ingest Client workstation startup the Ingest subsystem in the operational mode configuration.	Verify that the Ingest subsystem is started in the operational mode and is registered in the CSS name service within the operational mode namespace.		
3.	On the Primary Ingest Client workstation startup the Ingest subsystem in the test mode configuration.	Verify that the Ingest subsystem is started in the test mode and is registered in the CSS name service within the test mode namespace.		
4.	Login to the LPS Client workstation (real or simulated). > <user name> > <Password>			
5.	On the LPS Client workstation start the			

	<p>LPS Interface driver and initiate a valid application program-to-applications TCP/IP connection with Ingest in the operational mode.</p> <p>LPS sends a valid Authentication Request to Ingest (to verify user privileges).</p>			
6.	<p>On the LPS Client workstation start the LPS Interface driver a second time and initiate a valid application program-to-applications TCP/IP connection with Ingest in the test mode.</p> <p>LPS sends a valid Authentication Request to Ingest (to verify user privileges).</p>			
7.	<p>On the LPS Client workstation, after receiving the Authentication Response on the first LPS interface driver, send a Data Availability Notice (DAN) to Ingest via the Gateway.</p>			
8.	<p>On the LPS Client workstation, after receiving the Authentication Response on the second LPS interface driver, send a Data Availability Notice (DAN) to Ingest via the Gateway.</p>			
9.	<p>On the LPS Client workstation, after sending the Data Availability Acknowledgment message on the first LPS interface driver, close the connection.</p>			

10.	On the LPS Client workstation, after sending the Data Availability Acknowledgment message on the second LPS interface driver, close the connection.			
11.	On the LPS Client workstation shutdown the first LPS interface driver.			
12.	On the LPS Client workstation shutdown the second LPS interface driver.			
13.	On the Primary Ingest Client workstation verify the granule file(s) that were ingested in the operational mode reside on the operational area of the staging disk. Perform an “ls -l” in the staging disk directory.	The granule file(s) must reside on the operational area of the staging disk.		
14.	On the Primary Ingest Client workstation verify the granule file(s) that were ingested in the test mode reside on the test mode area of the staging disk. Perform an “ls -l” in the staging disk directory.	The granule file(s) must reside on the test mode area of the staging disk.		
15.	On the Primary Ingest Client workstation display the MSS Even Log file.	Verify that the log contains mode identifier information for cost and accounting data entries.		
16.	On the Primary Ingest Client workstation shutdown the Ingest subsystem in test mode configuration.			

17.	<p>Login to the Backup Ingest Client workstation.</p> <p>> <user name></p> <p>> <Password></p>			
18.	<p>On the Backup Ingest Client workstation startup the Ingest subsystem in the test mode configuration.</p>	<p>Verify that the Ingest subsystem is started in the test mode and is registered in the CSS name service within the test mode namespace.</p>		
19.	<p>On the LPS Client workstation start the LPS Interface driver and initiate a valid application program-to-applications TCP/IP connection with Ingest in the operational mode.</p> <p>LPS sends a valid Authentication Request to Ingest (to verify user privileges).</p>			
20.	<p>On the LPS Client workstation start the LPS Interface driver a second time and initiate a valid application program-to-applications TCP/IP connection with Ingest in the test mode.</p> <p>LPS sends a valid Authentication Request to Ingest (to verify user privileges).</p>			
21.	<p>On the LPS Client workstation, after receiving the Authentication Response on the first LPS interface driver, send a Data</p>			

	Availability Notice (DAN) to Ingest via the Gateway.			
22.	On the LPS Client workstation, after receiving the Authentication Response on the second LPS interface driver, send a Data Availability Notice (DAN) to Ingest via the Gateway.			
23.	On the LPS Client workstation, after sending the Data Availability Acknowledgment message on the first LPS interface driver, close the connection.			
24.	On the LPS Client workstation, after sending the Data Availability Acknowledgment message on the second LPS interface driver, close the connection.			
25.	On the LPS Client workstation shutdown the first LPS interface driver.			
26.	On the LPS Client workstation shutdown the second LPS interface driver.			
27.	On the Primary Ingest Client workstation verify the granule file(s) that were ingested in the operational mode reside on the operational area of the staging disk. Perform an “ls -l” in the staging disk directory.	The granule file(s) must reside on the operational area of the staging disk.		
28.	On the Backup Ingest Client workstation verify the granule file(s) that were	The granule file(s) must reside on the test mode area of the staging disk.		

	ingested in the test mode reside on the test mode area of the staging disk. Perform an “ls -l” in the staging disk directory.			
29.	On the Primary Ingest Client workstation display the MSS Even Log file.	Verify that the log contains mode identifier information for cost and accounting data entries.		
30.	On the Backup Ingest Client workstation display the MSS Even Log file.	Verify that the log contains mode identifier information for cost and accounting data entries.		
31.	Logoff the LPS Client workstation.			
32.	On the Backup Ingest Client workstation shutdown the Ingest subsystem.			
33.	Logoff the Backup Ingest Client workstation.			
34.	On the Primary Ingest Client workstation shutdown the Ingest subsystem.			
35.	Logoff the Primary Ingest Client workstation.			

5.1.2.3.2 Test Case 2: Fault Detection and Isolation Capabilities Test (T212-30.01.02)

Step No.	Test Steps	Expected Results	Comments	Pass/Fail
1.	Login to the MSS workstation. > <user name> > <Password>			
2.	On the MSS workstation access HP OpenView.			
3.	Login to the Ingest Client workstation. > <user name> > <Password>			
4.	On the Ingest Client workstation startup the Ingest subsystem in the operational mode configuration.			
5.	Have an authorized person shutdown the Ingest Client hardware.			
6.	Verify that a fault notification is displayed on the HP OpenView screen.	A fault notification must be displayed on the HP OpenView screen.		
7.	Use HP OpenView to isolate the fault by traversing the submaps.	The fault must be isolated to the most basic component.		
8.	Display the HP OpenView log file.	The log file must contain an entry for the Ingest hardware fault.		

9.	Have an authorized person startup the Ingest Client hardware.			
10.	Verify that the fault has been cleared from the HP OpenView screen.			
11.	On the Ingest Client workstation startup the Ingest subsystem in the test mode configuration.			
12.	Have an authorized person shutdown the Ingest Client hardware.			
13.	Verify that a fault notification is displayed on the HP OpenView screen.	A fault notification must be displayed on the HP OpenView screen.		
14.	Use HP OpenView to isolate the fault by traversing the submaps.	The fault must be isolated to the most basic component.		
15.	Display the HP OpenView log file.	The log file must contain an entry for the Ingest hardware fault.		
16.	Have an authorized person startup the Ingest Client hardware.			
17.	Verify that the fault has been cleared from the HP OpenView screen.			
18.	Exit from HP OpenView.			
19.	Logoff the MSS workstation.			
20.	Logoff the Ingest Client workstation.			

5.1.2.4 Intermediate Ingest and Data Server Build Test (B212.01)

5.1.2.4.1 Electronic and Media Ingest and Archive Scenario Test (B212.01.01)

Step No.	Test Steps	Expected Results	Comments	Pass/Fail
1.	Login to the Ingest Client workstation. > <user name> > <Password>			
2.	Login to the Science Data Server workstation. > <user name> > <Password>			
3.	Login to the Landsat 7 IAS workstation (real or simulated). > <user name> > <Password>			
4.	On the Ingest Client workstation start the ECS INGEST GUI.			
5.	On the ECS INGEST GUI select the Monitor & Control function and enter the appropriate information to monitor Ingest Requests from the Landsat IAS.			
6.	On the Science Data Server workstation			

	start up the Science Data Server GUI.			
7.	On the Science Data Server GUI select the System Requests function.			
8.	On the Landsat IAS workstation start Netscape and then access the ECS HTML Interactive Ingest main page.			
9.	On the ECS HTML Interactive Ingest main page enter the Landsat IAS User Name and then select the Create DAN function.			
10.	On the ECS HTML Interactive Ingest Create DAN page create a DAN for ETM+ data.			
11.	On the Landsat IAS workstation FTP the DAN to the appropriate location on the ECS DAAC.			
12.	On the ECS HTML Interactive Ingest return to the main page.			
13.	On the ECS HTML Interactive Ingest main page select the Submit Data Availability Notice (DAN) function.			
14.	On the ECS HTML Interactive Ingest Submit DAN page select the DAN that contains the ETM+ data and then select the Submit button.			
15.	Use the ECS INGEST GUI to monitor the			

	Ingest Request.			
16.	When the ECS INGEST GUI indicates that the Ingest Request is complete continue with the next step.			
17.	On the ECS HTML Interactive Ingest return to the main page and then select the View Data Delivery Notice (DDN) function.			
18.	On the ECS HTML Interactive Ingest View DDN page select the appropriate DDN message to view.	Verify that the DDN message indicates that the data was successfully archived.		
19.	On the ECS INGEST GUI select the History Log function and enter the appropriate information to view the latest Ingest Requests from the Landsat IAS.	Verify that the History Log contains the appropriate information.		
20.	On the Ingest Client workstation display the MSS Event Log file.	Verify that the MSS Event Log contains appropriate entries.		
21.	On the Science Data Server GUI verify that there was a System Request to insert the ETM+ data.			
22.	On the Science Data Server workstation display the MSS Event Log file.	Verify that the Science Data Server MSS Event Log contains appropriate entries.		
23.	On the Science Data Server workstation query the Science Data Server database (inventory) to verify that the ETM+ core metadata was inserted.			

24.	On the Science Data Server workstation obtain a listing of the archive directory where the ETM+ data was placed.	Verify that the listing contains the ingested data.		
25.	On the Landsat IAS workstation exit from Netscape.			
26.	Logoff the Landsat IAS workstation.			
27.	On the ECS INGEST GUI select the Media Ingest function and then enter the appropriate information to ingest AM-1 ASTER data from a 3D tape received from the ASTER GDS.			
28.	On the ECS INGEST GUI select the Monitor & Control function and enter the appropriate information to monitor Ingest Requests from the ASTER GDS.			
29.	Use the ECS INGEST GUI to monitor the Ingest Request.			
30.	When the ECS INGEST GUI indicates that the Ingest Request is complete continue with the next step.			
31.	On the ECS INGEST GUI select the History Log function and enter the appropriate information to view the latest Ingest Requests from the ASTER GDS.	Verify that the History Log contains the appropriate information.		
32.	On the Ingest Client workstation display the MSS Event Log file.	Verify that the Ingest MSS Event Log contains entries.		

33.	On the Science Data Server GUI verify that there was a System Request to insert the AM-1 ASTER data.			
34.	On the Science Data Server workstation display the MSS Event Log file.	Verify that the Science Data Server MSS Event Log contains appropriate entries.		
35.	On the Science Data Server workstation query the Science Data Server database (inventory) to verify that the AM-1 ASTER core metadata was inserted.			
36.	On the Science Data Server workstation obtain a listing of the archive directory where the AM-1 ASTER data was placed.	Verify that the listing contains the ingested data.		
37.	Repeat steps 27 through 36 for CERES data on 8mm tape from EDOS.			
38.	Repeat steps 27 through 36 for MISR data on 8mm tape from EDOS..			
39.	Repeat steps 27 through 36 for MODIS data on 8mm tape from EDOS..			
40.	Repeat steps 27 through 36 for MOPITT data on 8mm tape from EDOS..			
41.	Exit the Science Data Server GUI.			
42.	Logoff the Science Data Server workstation.			
43.	Exit the ECS INGEST GUI.			

44.	Logoff the Ingest Client workstation.			
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5.1.2.4.2 Off-line/Test Mode Suspension Scenario Test (B212.01.02)

Step No.	Test Steps	Expected Results	Comments	Pass/Fail
1.	Login to the Ingest Client workstation. > <user name> > <Password>			
2.	Login to the Landsat 7 IAS workstation (real or simulated). > <user name> > <Password>			
3.	On the Primary Ingest Client workstation startup the Ingest subsystem in the off-line (test mode) configuration.	Verify that the Ingest subsystem is started in the off-line (test mode).		
4.	On the Landsat IAS workstation start Netscape and then access the ECS HTML Interactive Ingest main page.			
5.	On the ECS HTML Interactive Ingest main page enter the Landsat IAS User Name and then select the Create DAN function.			
6.	On the ECS HTML Interactive Ingest Create DAN page create four DANs for different ETM+ data sets.			
7.	On the Landsat IAS workstation FTP the			

	DANs to the appropriate location on the ECS DAAC.			
8.	On the ECS HTML Interactive Ingest return to the main page.			
9.	On the ECS HTML Interactive Ingest main page select the Submit Data Availability Notice (DAN) function.			
10.	On the Ingest Client workstation start the ECS INGEST GUI in off-line (test mode) configuration.			
11.	On the ECS INGEST GUI select the Media Ingest function and then enter the appropriate information to ingest AM-1 ASTER data from a 3D tape received from the ASTER GDS.			
12.	On the ECS HTML Interactive Ingest Submit DAN page select the four DANs containing the different sets of ETM+ data and then select the Submit button.			
13.	On the ECS INGEST GUI select the Monitor & Control function and enter the appropriate information to monitor Ingest Requests from the Landsat IAS and ASTER GDS.			
14.	On the ECS INGEST GUI, using an authorized operators account for suspension of Ingest Requests, select one	Verify that only the selected Request ID was suspended.		

	Request ID from the Landsat 7 IAS and then select the Suspend button.			
15.	On the ECS INGEST GUI, using an authorized operators account, select the suspended Request ID from the Landsat IAS and then select the Cancel button.			
16.	On the ECS INGEST GUI, using an authorized operators account, select two Request Ids from the Landsat IAS and then select the Suspend button.	Verify that only the selected Request IDs were suspended.		
17.	On the ECS INGEST GUI, using an authorized operators account, select all of the suspended Request IDs from the Landsat IAS and then select the Cancel button.			
18.	On the ECS INGEST GUI, using an unauthorized operators account, select all remaining Request Ids from the Landsat IAS and ASTER GDS and then select the Suspend button.	Verify that none of the selected Request IDs were suspended.		
19.	On the ECS INGEST GUI, using an authorized operators account, select all remaining Request Ids from the Landsat IAS and ASTER GDS and then select the Suspend button.	Verify that only the requested IDs were suspended.		
20.	On the ECS INGEST GUI, using an authorized operators account, select all of the suspended Request Ids from the			

	Landsat IAS and ASTER GDS and then select the Cancel button.			
21.	On the Ingest Client workstation display the MSS Event Log file.	Verify that the MSS Event Log contains an entry showing an attempt to suspend Ingest Requests from an invalid account.		
22.	Exit the ECS INGEST GUI.			
23.	Logoff of the Landsat IAS workstation.			
24.	Logoff of the Ingest Client workstation.			

5.1.3 Client Subsystem

5.1.3.1 Distributed Client Thread IA (T222-31.01)

5.1.3.1.1 Test Case 1: User Comments (T222-31.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Log on to the Client workstation.	The ECS desktop is displayed.		
2	Log into the DAAC and SMC simulator.	The simulator screens are displayed.		
3	From the Netscape browser access the ECS Comment Survey Tool.	The icon is displayed.		
4	Select and click the service icon of the service.	The questionnaire is displayed.		
5	Fill out the comment survey form on product quality data, filling in all fields.	The typed inputs are displayed on the form.		
6	Press the Submit button.	Status message is displayed for the successful submission to DAAC.		
7	Display the submitted comment survey form using the DAAC simulator.	The message is displayed and it describes data from that DAAC.		
8	Select and click the service icon of the service.	The questionnaire is displayed.		
9	Fill out the comment survey form on ECS service quality evaluation.	The typed inputs are displayed on the form.		

10	Press the Submit button.	Status message is displayed for the successful submission to SMC.		
11	Display the submitted comment survey form using the SMC simulator.	The message is displayed.		
12				
13	Select and click the service icon of the service.	The questionnaire is displayed.		
14	Fill out the comment survey form for schedule performance assessment.	The typed inputs are displayed on the form.		
15	Press the Submit button.	Status message is displayed for the successful submission to SMC.		
16	Display the submitted comment survey form using the SMC simulator.	The message is displayed.		
17	Select the Retrieve User Comments commands.	The form is displayed.		
18	Enter name of current user, subject, and current date/time of messages just submitted.	The typed inputs are displayed on the form.		
19	Press the Submit button.	Requested data is displayed.		
20	Inspect the displayed data to ensure it matches the input data.	User comments were retrieved based on author, subject, and date/time.		
21	Log off the ECS system.	The user is logged off from the ECS system.		

5.1.3.1.2 Test Case 2: Account Balance/History (T222-31.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Log on to the Client workstation.	The ECS desktop is displayed.		
2	Create a request for the user's current account balance.	The input data is displayed.		
3	Submit the request.	A message is displayed for the successful submission.		
4	Create a request for the another user's current account balance.	The input data is displayed.		
5	Submit the request.	A message is displayed for the denying access to the data.		
6	Create a request for the user's account history.	The input data is displayed.		
7	Submit the request.	A message is displayed for the successful submission.		
8	Create a request for the another user's account history.	The input data is displayed.		
9	Submit the request.	A message is displayed for the denying access to the data.		
10	Log off the ECS system.	The user is logged off from the ECS system.		

5.1.3.1.3 Test Case 3: Web Terminal Interface (T222-31.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Log on to the Client workstation.	The ECS desktop is displayed.		
2	Click on the icon for Netscape Navigator.	The Netscape Navigator window is displayed. User has system access from a local workstation.		
3	Check for minimal and consistent use of non-standard keys by pressing the function keys, and other non-standard keys.	Keys either have no effect or comply to the operator's manual.		
4	Open several of the drop down menus from the menu bar to display the menu trees.	Menu trees are utilized by the application.		
5	Select several of the commands from the menus.	The commands are executed (when applicable)		
6	Use the displayed command equivalents to execute the commands.	The commands are executed (when applicable)		
7	Use the search capability to locate ECS data.	Data screen is displayed.		
8	Select the Save command from the pull down menu to save the form.	Save screen is displayed.		
9	Name the file "3101TestData-DTG".	File is displayed.		

10	Select Quit from the File menu.	The ESST window is removed.		
11	Launch ESST by double-clicking on the ESST icon.	The ESST window is displayed.		
12	Select Open in the File menu.	The Open window is displayed.		
13	Locate and select “3101TestData-DTG” in the Open window.	The name of the file is displayed.		
14	Select Open in the Open window.	The search form and contents are displayed. Text information is accessed as plain text documents.		
15	Delete the file in the prescribed manner.	A verify delete message is displayed.		
16	Approve the delete action.	The document file is deleted.		
17	Select Quit from the File Menu.	The ESST window is removed.		
18	Log off the ECS system.	The user is logged off from the ECS system.		
19	From a remote terminal, launch Netscape.	The Netscape window is displayed.		
20	Enter the URL for an ECS function.	The ECS screen displayed.		
21	Inspect the terminology and commands in the command menus.	The terminology and commands are standardized		
22	Quit Netscape.	The window is removed.		

5.1.3.1.4 Test Case 4: ChUI Terminal (T222-31.01.04)

Requirement will be deleted. ROM #96-0352 and 96-0630.

5.1.3.1.5 Test Case 5: Error Messages (T222-31.01.05)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Log on to ECS desktop on a Client workstation.	The ECS desktop is displayed.		
2	Double-click on the web tool icon.	The web tool window is displayed.		
3	Type a series of invalid entries into several fields. Try to submit searches without filling all mandatory fields.	Error messages are displayed.		
4	Inspect the error messages.	The error messages are appropriate to the error and are self-explanatory.		
5	Click OK to remove the error messages.	The error messages are removed.		
6	Type valid entries into the same fields.			
7	Select Spatial parameters.	The Spatial Window is displayed.		
8	Select parameters to submit a search	The parameters are displayed.		
9	Do not select a mandatory parameter.			
10	Select submit search.	An Error message is displayed stating that all mandatory fields must be completed.		

11	Exit the web tool by clicking on Exit in the tool window and Yes on the confirmation window.	The window is removed.		
12	Exit the Desktop by clicking on Exit and Yes in the confirmation window.			

5.1.3.1.6 Test Case 6: Submit Software and Documentation (T222-31.01.06)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Log on to the Client workstation.	The ECS desktop is displayed.		
2	Click on the ESST icon to launch the application.	The ESST window is displayed.		
3	Select “Guide” as the search type.	“Guide” radio button is highlighted.		
4	Fill in the parameters, request data on products, instruments and satellites.	A window is displayed containing the requested data.		
5	Enter “Guide1” to designate a file for the search results.			
6	Submit the search.	A “Detailed Guide Results Screen” window is displayed containing the requested data.		
7	Verify the search results match the search criteria.	The guide data is the same as requested.		
8	Save the data to the user’s file area.	The data is saved to the local system.		
9	Close the “Detailed Guide Results Screen.”	The window is removed.		
10	Select the submit software and documentation tool.	A selection window is displayed.		
11	Create a submission form to the Guide. Attach software and document data			

12	Attach software and document data.			
13	Submit the form to the guide.			
14	Select the tool for Guide Search Screen.	Guide Search screen is displayed.		
15	Select “Guide” as the search type.	“Guide” radio button is highlighted.		
16	Fill in the parameters to request the data just submitted to the Guide.	A window is displayed containing the requested data.		
17	Enter “Guide2” to designate a file for the search results.			
18	Submit the search.	A “Detailed Guide Results Screen” window is displayed containing the requested data.		
19	Verify a message is returned verifying the submitted data was successfully received.	A response message is displayed indicating the status of the submittal.		
20	Verify the search results match the search criteria.	The guide data is the same as requested. The user successful input software and related documentation into the system.		
21	Close the “Detailed Guide Results Screen” and the “Guide Results” window.	The windows are removed.		
22	Close the Client by selecting the Exit button.			
23	Log off the ECS system.	The user is logged off from the ECS system.		

5.1.3.1.7 Test Case 7: Display ESDIS Project Policies & Procedures (T222-31.01.07)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Log on to the Client workstation.	The ECS desktop is displayed.		
2	Enter the URL for the ESDIS Project Polices and Procedures.	The window containing the requested information is displayed.		
3	Click on several of the listed hypertext documents to display them.	The next level is displayed.		
4	If a lower level containing the documents exists, continue clicking of a hypertext name until the document is displayed.			
5	Inspect the documents.	The displayed documents are as requested.		
6	Close the documents	The documents are removed from the window.		
7	Exit the Desktop by clicking on Exit and Yes in the confirmation window.			

5.1.3.1.8 Test Case 8: Save and Restore Searches and Forms (T222-31.01.08)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Initiate the ESST.	The ESST main screen will come up.		
2	Create a new search by selecting value(s) for several attributes.	A new search is created.		
3	Select Search/Save from the file menu.	The Search menu is dropped down. The Save dialog box pops up.		
4	Save the search as "Search_1" by typing the name in the Selection box.	The search is saved as "Search_1".		
5	Clear the search by clicking on "Clear All".	The search is cleared.		
6	Create another new search by selecting value(s) for several attributes.	Another new search is created.		
7	Select Search/Save As from the file menu.	The Search menu is dropped down. The Save dialog box pops up.		
8	Save the search as "Search_2".	The search is saved as "Search_2".		
9	Retrieve "Search_1".	"Search_1" is displayed in the Search window.		
10	Inspect "Search_1".	Verify that the current "Search_1" contains the same information as the saved "Search_1".		

11	Retrieve "Search_2".	"Search_2" is displayed in the Search window.		
12	Inspect "Search_2".	Verify that the current "Search_2" contains the same information as the saved "Search_2".		
13	Select Search/Open.	The search menu is brought down. The file selection dialog box is invoked.		
14	Enter a name in the "Selection" field that does not exist.	A name is entered into the field.		
15	Click on "OK".	The file selection box is closed. A message indicates the specified search was not found.		
16	Select Search/Open.	The search menu is brought down. The file selection dialog box is invoked.		
17	Click on a file that exists in the directory but is not a saved search.	The file is selected. The file selection box is closed. A message is displayed indicating the specified file was not a saved ESST search.		
18	Exit the ESST by clicking on "Quit" in the Search menu.	A prompt comes up asking for confirmation.		
19	Click "Yes"	The ESST is closed.		

5.1.3.1.9 Test Case 9: Interface with Command Language (T222-31.01.09)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Log on to the Client workstation.	The ECS desktop is displayed.		
2	Double click on the ESST icon.	The ESST window is displayed.		
3	Access the command language through the appropriate menu selection.	A window is displayed.		
4	Type in data search commands and enter using the appropriate format.	The commands are displayed in the window.		
5	Submit the search.	A search results screen is displayed on the desktop.		
6	Verify the results of the search.	The results are the same as requested.		
7	Close the window.	The window is removed from the desktop.		
8	Close the ESST window.	The window is removed from the desktop.		
9	Log off the ECS system.	The user is logged off from the ECS system.		

5.1.3.2 Distributed Client Thread IB (T222-32.01)

5.1.3.2.1 Test Case 1: DAAC-Unique Services (T222-32.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Log on to the Client workstation.	The ECS desktop is displayed.		
2	Access the ECS configurations file.	The ECS configurations file is displayed.	Specific instructions will be included in the Rel. B Version Description Document	
3	Add a new application into the configuration files.	The new application is added.		
4	Add an icon image for the new application file into the Data Images directory.	The required icon information is added.		
5	Launch the desktop	The desktop window is displayed.		
6	Launch the ECS Desktop.	The ECS Desktop is displayed.		
7	Inspect the ECS desktop and locate the new application icon.	The new application was added to the desktop.		
8	Double click on the new application icon.	The new application window is displayed on the screen		
9	Quit the new application.	The new application window is removed from the screen.		

10	Log off the ECS system.	The user is logged off from the ECS system.		
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5.1.3.2.2 Test Case 2: DAAC Specific Data Analysis (T222-32.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Log on to the Client workstation.	The ECS desktop is displayed.		
2	Access the ECS configurations file.	The ECS configurations file is displayed.	Specific instructions will be included in the Rel. B Version Description Document	
3	Add a DAAC unique utility file into the configuration files.	The utility file information is displayed.		
4	Add an icon image for the new utility file into the Data Images directory.	The image and name of the icon are added.		
5	Bring up the ECS Desktop.	The ECS Desktop is displayed.		
6	Inspect the ECS Desktop and locate the DAAC unique utility.	The new utility was added to the desktop.		
7	Launch the DAAC unique utility	A window is opened on the desktop displaying the utility.		
8	Quit the DAAC unique utility.	The window is removed.		
9	Log off the ECS system.	The user is logged off from the ECS system.		

5.1.3.2.3 Test Case 3: Web Terminal Valid Values (T222-32.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Log on to the Client workstation.	The ECS Desktop is displayed.		
2	Double-click on the JEST icon.	The JEST screen is displayed.		
3	Select the Search folder	The contents of the search folder are displayed.		
4	Double click on each of the attribute icons.	The list of valid values is displayed in the Valid Values window.		
5	Examine the list of valid values for each attribute.	The valid values unique to that attribute are displayed.		
6	Select the valid values for the search.	The selected valid values are listed..		
7	Select Quit in the File menu to close the JEST function	The JEST window is removed from the desktop.		
8	Log off the ECS system.	The user is logged off from the ECS system.		

5.1.4 Data Management Subsystem

5.1.4.1 Enhanced Data Services Thread I (T231-10.01)

5.1.4.1.1 Test Case 1: On-line Full and Incremental Backup (T231-10.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Using a network browser, enter the URL for the Earth Science On-line Directory Administration and Moderation Home Page	Verify that the Earth Science On-line Directory Administration and Moderation Home Page appears"		
2	Select the “ Administratiion ” icon located at the bottom of the page			
3	Select “ Create a Moderation Group ”	Verify that the Cteate Group home page appears		
4	Enter “ Acid Rains ”	Verify entry		
5	Enter “ Acid Rain is deadly” in the Description field	Verify entry		
6	Enter “ Tester 1 ” in the Moderator field	Verify entry		
7	Enter “ 20 ” in the Provider ID field	Verify entry		
8	Enter “ 10 ” and “ 30 ” in the Application Service ids	Verify entry		
9	Enter “ Tester 2 ” in the ECS User name field	Verify entry		

10	Enter < acl password > in the ECS password field	Verify entry		
11	Select “ Submit ” located at the bottom of the page	Verify the “Polluted Water for Update” Moderation Queue home page is returned		
12	Select “ Display selected request ” is returned	Verify that “Moderate Data” home page is returned		
13	Review the Comments to moderator from contributor			
14	Select “ accept request ”	Verify that notification is returned “stating that your request was accepted		
15	Perform a backup of the database			
16	Dump the database			
17	Restore the database	Verify that the database was restored		
18	Verify the transaction log contains this activity			
19	Perform incremental backups of the database at < time frame > intervals			
20	Dump the database			
21	Restore the database	Verify that the database was restored	S-DMS-20300, S-DMS-20310	
22	Log-off the ECS workstation.			

5.1.4.1.2 Test Case 2: Manual and Automatic Recovery (T231-10.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Using a network browser, enter the URL for the Earth Science On-line Directory Administration and Moderation Home Page	Verify that the Earth Science On-line Directory Administration and Moderation Home Page appears"		
2	Select the “ Administration ” icon located at the bottom of the page			
3	Select “ Create a Moderation Group ”	Verify that the Cteate Group home page appears		
4	Enter “ Acid Rains ”	Verify entry		
5	Enter “ Acid Rain is deadly” in the Description field	Verify entry		
6	Enter “ Tester 1 ” in the Moderator field	Verify entry		
7	Enter “ 20 ” in the Provider ID field	Verify entry		
8	Enter “ 10 ” and “ 30 ” in the Application Service ids	Verify entry		
9	Enter “ Tester 2 ” in the ECS User name field	Verify entry		
10	Enter < acl password > in the ECS password field	Verify entry		

11	Select “ Submit ” located at the bottom of the page	Verify the “Polluted Water for Update” Moderation Queue home page is returned		
12	Select “ Display selected request ” is returned	Verify that “Moderate Data” home page is returned		
13	Review the Comments to moderator from contributor			
14	Select “ accept request ”	Verify that notification is returned “stating that your request was accepted		
15	Restart the system after a TBD period of time	Verify that the system has been restored, and automatic recovery is complete		
16	Perform steps 1 thru 14 again			
17	Perform manual recovery	Verify that the system has been restored, and manual recovery is complete	S-DMS-20320, S-DMS-20330, S-DMS-20640	
18	Log-off the ECS workstation.			

5.1.4.1.3 Test Case 3: Import and Export Functions (T231-10.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Logon onto <server name>	Verify access entry		
2	At the command line, enter <bcp.copyout> <name of database>			
3	Enter “isql -U{password} -P{password} <drop.schema>” at the next sybase prompt			
4	Enter “database name” at the Sybase prompt			
5	Enter “go” at the next Sybase prompt and the return key	Accessing the selected database		
6	Enter “sp_help” table name			
7	Enter “go” at the next sybase prompt and the return key	This reflects the description of the database		
8	Verify that the database is emptied			
9	Enter “exit” at the sybase prompt			
10	At command line, enter <bcp.copyin> <name of database>			
11	Enter “database name” at the Sybase prompt			

12	Enter “ go ” at the next Sybase prompt and the return key			
13	Enter “ sp_help ” table name			
14	Enter “ exit ” at the Sybase prompt			
15	Using a network browser, enter the URL for the Earth Science On-line Directory Home Page	Verify that “Home Page appears on the screen		
16	Select the “ ESOD index ”	Verify the index home page appears		
17	Select the letter “ a ”	Verify that the data is returned	S-DMS-20160, S-DMS-20170, S-DMS-20180, S-DMS-20340, S-DMS-20350, S-DMS-20930	
18	Log-off the ECS workstation.			

5.1.4.1.4 Test Case 4: Thesaurus for DD Entries (T231-10.01.04)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Logon to the ECS.	The user is logged on.		
2	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
3	Click on the Data Dictionary Tool Icon	Verify that the Data Dictionary Tool Homepage appears"		
4	Click on Thesaurus for DD entries	Verify that a page containing in alphabetical listing all the DD entries		
5	Click on a “ B ” to give you all the data dictionary listings under B.	Verify that the data dictionary listings under B are displayed.		
6	Go back to the home page by clicking on “ Home ”	Verify return to DD home page		
7	Enter a word in the search criteria field for a DD entry such as “ ASTER ”	Verify that a page with detailed entry of ASTER is displayed.	S-DMS-21020	
8	Log-off the ECS workstation.			

5.1.4.1.5 Test Case 5: Administration Utility for Performance (T231-10.01.05)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Logon to the ECS.	The user is logged on.		
2	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
3	Click on the Data Dictionary Tool Icon	Verify that the Data Dictionary Tool Homepage appears"		
4	Click on administrative utility			
5	Verify that system disk is being monitored			
6	Verify that there are memory management taking place			
7	Verify that the CPU			
8	Verify performance tuning capabilities			
9	Login to the “ Access Control Administrative ”			
10	Utilizing an authorized user account, access the performance administrative utilities			
11	Perform a database query			
12	Time how long it takes for the query to end			

13	Subtract any delays not associated to server performance			
14	Delete any old queries that may still exist			
15	Perform another database query	Verify if the performance of the query has improved based on the database being cleaned-up	S-DMS-20260, S-DMS-20270, S-DMS-20280, S-DMS-20290	
16	Log-off the ECS workstation.			

5.1.4.1.6 Test Case 6: Set Thresholds (T231-10.01.06)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	Logon to the ECS.	The user is logged on.		
2	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
3	Select ESST icon and double click on the icon			
4	Find “Search Type” at the top of the Search Screen and select " Inventory " as the search type.			
5	Verify the radio button next to " Inventory " is highlighted.			
6	Click spatial and highlight the region you wish to do a search on			
7	Click on Platform and select AM-1			
8	Click on Topic and select AtmosphericComposition			
9	Click on Archive and select Landover			
10	Click on Instrument and select AVHRR			
11	Click on Parameter and select Albedo			

12	Click on Short Name Collection and select Tovs Pathfinder			
13	Click on the number of results you want sent back			
14	Click on “submit”			
15	Verify the "Inventory Results Screen" appears with Tovs pathfinder granules.		S-CLS-15950	
16	Log-off the ECS workstation.			

5.1.4.1.7 Test Case 7: Subscription Administrative Test (T231-10.01.07)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Logon to the ECS.	The user is logged on.		
2	Access the Desktop by typing “EcsDesktop” at the command line.	The desktop is displayed.		
3	Invoke subscription tool			
4	Create subscription			
5	Update and list selected subscription			
6	Renew selected subscription			
7	Cancel selected subscription			
8	Update selected subscription for on demand processing			
9	Terminate selected subscription for on demand processing			
10	Modify selected subscription for on demand processing		C-CLS-10950, S-CLS-11000, S-CLS-11250, S-CLS-11260, S-CLS-11270, S-CLS-11280	
11	Log-off the ECS workstation.			

5.1.4.1.8 Test Case 8: Service Request Submission API (T231-10.01.08)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	Logon to the ECS.	The user is logged on.		
2	Access the Desktop by typing “EcsDesktop” at the command line.	The desktop is displayed.		
3	Invoke the appropriate utility (driver) in order to communicate with the LIM.	The utility is invoked.		
4	Submit a service request to.	The service request is submitted and a message is displayed indicating the submittal.	S-CLS-00900	
5	Invoke the appropriate utility (driver) in order to communicate with the DIM.	The utility is invoked.		
6	Submit a service request to.	The service request is submitted and a message is displayed indicating the submittal.	S-CLS-10900	
7	Invoke the Data Dictionary tool.	The tool is displayed.		
8	Submit a service request to.	The service request is submitted and a message is displayed indicating the submittal.	S-CLS-21000	
9	Exit all tools and utilities.	The tools and utilities are exited.		

5.1.4.1.9 Test Case 9: Administrative Request Submission API (T231-10.01.09)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Logon to the ECS.	The user is logged on.		
2	Access the Desktop by typing “EcsDesktop” at the command line.	The desktop is displayed.		
3	Invoke the appropriate utility (driver) in order to communicate with the LIM.	The utility is invoked.		
4	Submit a request for administrative services.	The request is submitted and a message is displayed indicating the submittal.	S-CLS-00910	
5	Invoke the appropriate utility (driver) in order to communicate with the DIM.	The utility is invoked.		
6	Submit a request for administrative services.	The request is submitted and a message is displayed indicating the submittal.	S-CLS-10910	
7	Invoke the Data Dictionary tool.	The tool is displayed.		
8	Submit a request for administrative services.	The request is submitted and a message is displayed indicating the submittal.	S-CLS-21010	
9	Exit all tools and utilities.	The tools and utilities are exited.		

5.1.4.2 Local Information Manager Service Thread 1A (T231-31.01)

5.1.4.2.1 Test Case 1: LIM Schema Test (T231-31.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	Log-on to the ECS workstation as an ECS administrative personnel.	Successful log-on to ECS		
2	Remotely log-on to the sybase client. Note: Setup the environment to access the SQL server.			
3	Access the SQL server (i.e. Milo) by entering the following command: isql -Username -Ppassword	This command will allow the user to enter the database facility.		
4	Enter: sp-help	The sybase client will display the size, owner, database ID, creation date and option settings.		
5	Enter: sp-help <database_name>	The sybase client will display about a specified database..		
6	Enter SQL command to select the name of the database. use <database_name>			

7	<p>Update to an existing row in the existing table by entering the following T-SQL statements</p> <p>update <table_name> set <column_name1> = <expression1></p>	<p>The LIMGR will accept the request and update the table in the primary and secondary databases.</p> <p>It will log the entry for the change.</p>	<p>Backup is a process of creating a copy of the database on a separate storage device.</p>	
8	<p>Enter SQL statements to insert the row in the existing table:</p> <p>insert <database_name></p>	<p>The sybase server will add a row to an existing table.</p>		
9	<p>Enter SQL statements to insert the data in the existing table:</p> <p>insert <database_name> select row_no from <table_name></p>	<p>The sybase server will insert data in the existing table.</p>		
10	<p>Enter SQL statements to delete row(s) in the existing table:</p> <p>delete <database_name> where <column_name> != <item_name></p>	<p>The sybase server will update an existing table.</p>		

11	<p>Enter SQL statements to delete data from the existing table:</p> <p>delete <database_name></p> <p>where</p>	The sybase server will update an existing table.		
12	<p>View the change in the primary database by entering a following query:</p> <p>select <> <> <></p> <p>from <> <></p> <p>go</p>	The client will display the correct changes in the table.		
13	Click on the 'Search type' and select the 'Inventory'			
14	Click on the icon for 'Sensor' and select the instrument name(s)	The instrument name(s) will appear in the 'Discrete Attribute summary'		
15	Click on the icon for 'Platform' and select the platform name(s)	The instrument name(s) will appear in the 'Discrete Attribute summary'		

16	Click on the icon for 'Spatial' and select the region with the mouse	<p>A window for Time line will pop up.</p> <p>Lat and long information on the specified region will appear in the 'Discrete Attribute summary'</p>		
17	Click on the icon for 'Temporal' and select the time line	<p>A window for Time line will pop up.</p> <p>Start and end times will appear in the 'Discrete Attribute summary'</p>		
18	Submit the search.	The LIMGR will accept the search requests and display results received from more than one server.	Analyze the search result to ensure that LIM integrated the search result from different servers.	
19	Log-off the ECS workstation.			

5.1.4.2.2 Test Case 2: Partial Results Integration (T231-31.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Log-on to the ECS workstation as an ECS user.	Successful log-on to ECS	S-DMS-00230, S-DMS-00740	
2	Invoke the Earth Science Search Tool (ESST) GUI.			
3	Click on the 'Search type' and select the ' Advertising '			
4	Click on the icon for 'Sensor' and select the instrument name(s)	The instrument name(s) will appear in the 'Discrete Attribute summary'		
5	Click on the icon for ' Spatial ' and select the region with the mouse	A window for Time line will pop up. Lat and long information on the specified region will appear in the 'Discrete Attribute summary'		
6	Click on the icon for ' Temporal ' and select the time line	A window for Time line will pop up. Start and end times will appear in the 'Discrete Attribute summary'		

7	Submit the search.	The LIMGR will accept the search requests and display result.		
8	Browse the partial result and save it.			
9	Click on the ' Search type ' and select the ' Data Dictionary '			
10	Submit the search.	The LIMGR will accept the search requests and display result.		
11	Browse the partial result and integrate with the previous result.			
12	Log-off the ECS workstation.		S-DMS-00230, 00740	

5.1.4.2.3 Test Case 3: Data Granule Search by Science Disciplines (T231-31.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Log-on to the ECS workstation as an ECS user.	Successful log-on to ECS	S-DMS-00010, S-DMS-00300	
2	Invoke the Earth Science Search Tool (ESST) GUI.			
3	Click on the ' Search type ' button and select the 'Inventory' search type			
4	Construct a search for data from the science discipline.	The LIMGR will accept the search request. The client will display the known data from the specified science discipline.		
5	Construct a search for data granules of EOSDIS data.	The LIMGR will accept the search requests for all specified data servers. The client will display the known data from the specified science discipline.	Analyze the search result to ensure that the content is from the combination of all servers.	
6	Log-off the ECS workstation.		S-DMS-00010, 00300	

5.1.4.3 Local Information Manager Service Thread IB (T231-32.01)

5.1.4.3.1 Test Case 1: Database Replication (T231-32.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Log-on to the ECS workstation as an ECS user.	Successful log-on to ECS		
2	Remotely log-on to the sybase client. Note: Setup the environment to access the SQL server.		S-DMS-00210, S-DMS-01050, S-DMS-10610, S-DMS-11050	
3	Access the SQL server (i.e. Milo) by entering the following command: isql -Username -Ppassword	This command will allow the user to enter the database facility.		
4	Enter: sp-help	The sybase client will display the size, owner, database ID, creation date and option settings.		
5	Enter: sp-help <database_name>	The sybase client will display about a specified database..		
6	Enter SQL command to select the name of the database. use <database_name>			

7	<p>Update to an existing row in the existing table by entering the following T-SQL statements</p> <p>update <table_name> set <column_name1> = <expression1></p>	<p>The LIMGR will accept the request and update the table in the primary and secondary databases.</p> <p>It will log the entry for the change..</p>	<p>Backup is a process of creating a copy of the database on a separate storage device.</p>	
8	<p>View the change in the primary database by entering a following query:</p> <p>select <column_name1> from <table_name> go</p>	<p>The client will display the correct change in the table.</p>		
9	<p>Access to the backup database and view the change by entering a following query:</p> <p>select <column_name1> from <table_name> go</p>	<p>The client will display the correct change in the table.</p>		

10	Log-off the ECS workstation.			
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5.1.4.3.2 Test Case 2: Build Site Query Plan Test (T231-32.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	Log-on to the ECS workstation as an ECS user.	Successful log-on to ECS	S-DMS-00020, S-DMS-00040, S-DMS-00050	
2	Remotely log-on to the sybase client. Note: Setup the environment to access the SQL server.			
3	Access the SQL server (i.e. Milo) by entering the following command: isql -Username -Ppassword	This command will allow the user to enter the database facility.		
4	Enter: sp-help <table_name>	The sybase client will display the size, owner, database ID, creation date and option settings.		
5	Enter SQL command to select the name of the database. use <database_name>			

6	<p>Submit a query by entering the following T-SQL statements:</p> <pre> select <column_name1> <column_name2> from <table_name> go </pre>	<p>The client will display the correct change in the table.</p> <p>The LIMGR will accept the search requests and determine which data servers are required to perform a search request and build a site query plan as a result.</p> <p>The client will display search results</p>	<p>Search format should be compatible to the ESQL format (refer to Appendix A of the ECS requirement document 304).</p>	
7	Log-off the ECS workstation.			

5.1.4.3.3 Test Case 3: Integrate and Decompose Search Test (T231-32.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	Log-on to the ECS workstation as an ECS user.	Successful log-on to ECS	S-DMS-00100, S-DMS-00115, S-DMS-00550	
2	Invoke the ESST GUI.			
3	Click on ' Search type ' to select ' Inventory '			
4	Select an icon for 'Sensor'			
5	Click on a few instrument names and click the ' OK ' button.			
6	Activate the spatial selection window to specify spatial search region(s) to include in the query.			
7	Activate the temporal window to specify time range(s) to include in the query.			

8	Click on the ' Submit Search ' button	<p>The LIMGR will accept the search requests.</p> <p>The LIMGR will display search request decomposed into executable database queries.</p> <p>(See note in the observation/comment column)</p> <p>The result will be displayed on the screen.</p>	<p>Note: Checked with the developer for the following requirement and said that it is not implemented yet. So I am not sure about the procedure to verify the following requirement:</p> <p>The LIMGR will display search request decomposed into executable database queries.</p>	
9	Select options to save the results under LIM.	This option will save the search result.		
10	Construct another search as described above and submit it.	<p>The LIMGR will accept the search requests.</p> <p>The LIMGR will display search request decomposed into executable database queries.</p>		
11	Select options to save the results under LIM.	This option will save the search result.		
12	Select options to integrate (merge) the results from both searches for later use.	This option will save the search results from both searches.		
13	Submit inspect request against the saved results	The LIMGR will accept the search requests.		

14	Log-off the ECS workstation.			
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5.1.4.3.4 Test Case 4: Multiple Service Request (T231-32.01.04)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	Log-on to the ECS workstation as an ECS user.	Successful log-on to ECS		
2	Invoke the ESST GUI.			
3	Click on ' Search type ' to select ' Inventory '			
4	Select an icon for ' Sensor '			
5	Click on a few instrument names and click the ' OK ' button.			
6	Activate the spatial selection window to specify spatial search region(s) to include in the query.			
7	Activate the temporal window to specify time range(s) to include in the query.			
8	Click on the 'Submit Search' button	The LIMGR accepts the requests. The client will display the search results		
9	Click on ' Search type ' to select ' Data Dictionary '			
10	Select an icon for ' Platform '			
11	Click on a few platform names and click the ' OK ' button.			

12	Click on the ‘Submit Search’ button	The LIMGR accepts the requests. The client will display the search results		
13	Click on ‘Search type’ to select ‘Advertising’			
14	Select an icon for ‘Sensor’			
15	Click on a few instrument names and click the ‘OK’ button.			
16	Click on the ‘Submit Search’ button	The LIMGR accepts the requests. The client will display the search results		
17	Click on ‘Search type’ to select ‘Guide’			
18	Select an icon for ‘Topic Parameter’			
19	Click on a few parameter names and click the ‘OK’ button.			
20	Click on the ‘Submit Search’ button	The LIMGR accepts the requests. The client will display the search results		
21	Log-off the ECS workstation.			

5.1.4.3.5 Test Case 5: LIM Single Service Request (T231-32.01.05)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Log-on to the ECS workstation as an ECS user.	Successful log-on to ECS	Note: All search requests (multiple service requests) within a session.	
2	Invoke the ESST GUI.		S-DMS-00110, S-DMS-00130, S-DMS-00140, S-DMS-00150, S-DMS-00260, S-DMS-00990	
3	Click on ' Search type ' to select ' Inventory '			
4	Select an icon for ' Sensor '			
5	Click on a few instrument names and click the ' OK ' button.			
6	Activate the spatial selection window to specify spatial search region(s) to include in the query.			
7	Activate the temporal window to specify time range(s) to include in the query.			
8	Click on the ' Submit Search ' button	The LIMGR will accept the search requests. The result will be displayed on the screen.		
9	Select options to save the results under LIM.	This option will save the search result.		

10	Construct and submit another service request as above.	The LIMGR accepts the search requests		
11	Select an option to suspend the active service request.	The LIMGR accepts the requests to suspend the active service request.		
12	Select an option to resume the service request.	The LIMGR accepts the requests to resume the active service request.		
13	Construct and submit another service request as above.	The LIMGR accepts the search requests		
14	Select an option to terminate the active service request.	The LIMGR accepts the requests to terminate the active service request.		
15	Construct and submit another service request as above.	The LIMGR accepts the search requests		
16	Cancel the service request.	The LIMGR sends a notification of cancellation to the user via e-mail.		
17	Log-off the ECS workstation.			

5.1.4.3.6 Test Case 6: LIM Resource Estimation (T231-32.01.06)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Log-on to the ECS workstation as an ECS user.	Successful log-on to ECS	S-DMS-00160	
2	Invoke the ESST GUI.			
3	Click on ' Search type ' to select 'Inventory'			
4	Select an icon for ' Sensor '			
5	Click on a few instrument names and click the ' OK ' button.			
6	Activate the spatial selection window to specify spatial search region(s) to include in the query.			
7	Activate the temporal window to specify time range(s) to include in the query.			
8	Click on the ' Submit Search ' button	The LIMGR accepts the requests. The client will display the search results		
9	Click on ' Search type ' to select ' Data Dictionary '			
10	Select an icon for ' Platform '			

11	Click on a few platform names and click the ‘OK’ button.			
12	Click on the ‘Submit Search’ button	The LIMGR accepts the requests. The client will display the search results		
13	Click on ‘Search type’ to select ‘Advertising’			
14	Select an icon for ‘Sensor’			
15	Click on a few instrument names and click the ‘OK’ button.			
16	Click on the ‘Submit Search’ button	The LIMGR accepts the requests. The client will display the search results		
17	Click on ‘Search type’ to select ‘Guide’			
18	Select an icon for ‘Topic Parameter’			
19	Click on a few parameter names and click the ‘OK’ button.			
20	Click on the ‘Submit Search’ button	The LIMGR accepts the requests. The client will display the search results		
21	Submit a request to estimate the resources required to execute the pending Service Request.	The LIMGR accepts the requests. The client will display the estimate required to execute the pending service request.		

22	Log-off the ECS workstation.			
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5.1.4.4 Distributed Information Manager Service Thread I (T231-40.01)

5.1.4.4.1 Test Case 1: Subscription Changes Test (T231-40.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	Using a network browser, enter the URL for the Advertising Service Homepage (http://)	Verify that "Advertisement Service Home Page appears"		
2	Click on Search.	Verify that a drop down option appears		
3	Click on Search by Text String	Verify that the Search by Text String appears.		
4	Enter a text string to be search such as “ ASTER ”	Verify entry		
5	Click on submit	Verify that the search result returned with the product listing., providers and services.		
6	Click on the product “ ASTER 04 Brightness Temperature ”.	Verify that a product display of the product is shown with the product information such as (guide URL, date submitted, Group, Contact, Copyright, Provider, Service List, Product Type Name.		
7	Click on add subscription of this product	Subscription added		

8	Click on delete subscription of this product	Subscription added		
9	Click on " Home " at the bottom of the page to return to advertising home page	Advertising Service home page is displayed		
10	Log on to an ECS Client workstation " epdatasrv.gsfc.nasa.gov "			
11	Start the desktop by entering " EcsDesktop " on the command line	Desktop displayed		
12	Select ESST icon and double click on the icon	Verify that ESST is displayed		
13	Find "Search Type" at the top of the Search Screen and select " Inventory " as the search type.	Inventory is the default search type when the client is started.		
14	Verify the radio button next to " Inventory " is highlighted.			
15	Click on the change attribute button	Verify that the change attribute window is displayed		
16	Click on " short name collections "			
17	Click on " add " and then " apply "			
18	Click on exit to return	Verify that you've returned back to the ESST desktop		
19	Click on temporal	Verify that a temporal specification window is displayed		

20	Select the time period by highlighting the year 1999 - 2000	Verify highlight		
21	Return by clicking OK	Verify return to ESST window		
22	Click on Platform and select AM-1			
23	Click on Topic and select AtmosphericComposition			
24	Click on Archive and select Landover			
25	Click on Instrument and select AVHRR			
26	Click on Parameter and select Albedo			
27	Click on Short Name Collection and select ASF_Glac			
28	Click on “submit”	Verify that a submit dialog box appears		
29	Verify the "Inventory Results Screen" appears with ASF Glac granules.			
30	Close the "Inventory Results Screen"			
31	Verify that LIM was added to the federation			
32	Verify that LIM was deleted from the federation			
33	Verify that LIM was replaced from the federation			

5.1.4.4.2 Test Case 2: Integrate Partial Results (T231-40.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that a DIM exists with multiple LIMs in it's federation.	The DIM exists with multiple LIMs in it's federation.	Data.	
2	Ensure that the schema for each LIM is known.	The schema are known.	Data.	
3	Ensure that there is data in the databases to support searches which encompass multiple LIMs.	The data exists.	Data.	
4	Logon to the ECS.	The user is logged on.		
5	Access the Desktop by typing " EcsDesktop " at the command line.	The desktop is displayed.		
6	Invoke the ESST from the Desktop.	The search tool is displayed.		
7	Select the Search Type " Inventory ".	The type is selected.		
8	Select attribute ' Sensor ' and value " MODIS ". Press ' OK '.	The attribute is selected and the value is entered.		
9	Select attribute 'Temporal' and values " start: 06/06/1992, end: 06/06/1993 ". Press ' OK '.	The attributes is selected and the start/end value is entered.		

10	Select the 'Submit Search' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
11	Save the results as " search1 ".	The results are saved.		
12	Verify that the correct result set is returned.	The correct result set is returned.		
13	Remain in the same session.	The search result sets are returned and displayed.		
14	Select attribute ' Sensor ' and value " MODIS ". Press 'OK'.	The attribute is selected and the value is entered.		
15	Select attribute ' Temporal ' and values " start: 08/08/1994, end: 08/08/1995 ". Press 'OK'.	The attributes is selected and the start/end value is entered.		
16	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
17	Save the results as " search2 ".	The results are saved.		
18	Verify that the correct result is returned.	The correct result set is returned.		
19	Save the result sets into one integrated set of results as " int1 ".	The result sets are integrated.		

20	Remain in the same session and use integrated result set “ int1 ” for the following query.	The search result sets are returned and displayed.	S-DMS-10115	
21	Select attribute ‘Sensor’ and value “ MODIS ”. Press ‘OK’.	The attribute is selected and the value is entered.		
22	Select attribute ‘Temporal’ and values “ start: 08/08/1993, end: 08/08/1994 ”. Press ‘OK’.	The attributes is selected and the start/end value is entered.		
23	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
24	Verify that the result set only contains data found in previous result sets based on the specified search criteria.	The result set contains the correct data.		
25	Prepare a query that spans LIMs which will return all the Sea Surface Temperature and Humidity data over the Atlantic Ocean from January 1, 1990 to January 1, 1995 where the humidity and sea surface data is coincident in time and space.	The search is submitted.		
26				
27	Prepare and submit a search which spans multiple LIMs.	Notice is sent indicating that partial results are waiting.		

28	Request one set of partial results.	The partial results are displayed.	S-DMS-10760	
29	Request another set of partial results.	The partial results are displayed.	S-DMS-10760	
30	Integrate the results into one complete result set.	One integrated result set is created.	S-DMS-10110	
31	Exit the search tool.	The search tool is exited.		

5.1.4.4.3 Test Case 3: Cross DAAC Granule Search (T231-40.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that there is data in the databases to support searches across DAACs.	The data exists.	Data.	
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Prepare a query that spans DAACs which will return all the Sea Surface Temperature and Humidity data over the Atlantic Ocean from January 1, 1990 to January 1, 1995 where the humidity and sea surface data is coincident in time and space.	The search is submitted.	S-DMS-10010, S-DMS-10020	
6	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
7	Verify that the correct result set is returned.	The result set is correct.		

8	Prepare and submit a search request for specific data granules of EOSDIS data stored across multiple DAACs for a specific science discipline.	The search result set is returned and displayed.		
9	Prepare a query that spans DAACs for specific data granules of EOSDIS data for a specific science discipline.	The search is submitted.	S-DMS-10310	
10	Select the 'Submit Search' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
11	Verify that the correct result set is returned.	The result set is correct.		
12	Exit the search tool.	The search tool is exited.		

5.1.4.4.4 Test Case 4: Generate Distributed Query Plan (T231-40.01.04)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that a DIM exists with multiple LIMs and Data Servers in it's federation.	The DIM exists with multiple LIMs and Data Servers in it's federation.	Data.	
2	Ensure that the federated schema and the schema for each LIM and Data Server is known.	The schema are known.	Data.	
3	Ensure that there is data in the databases to support searches which encompass multiple LIMs and Data Servers.	The data exists.	Data.	
4	Logon to the ECS.	The user is logged on.		
5	Access the Desktop by typing " EcsDesktop " at the command line.	The desktop is displayed.		
6	Invoke the ESST from the Desktop.	The search tool is displayed.		
7	Select the Search Type " Inventory ".	The type is selected.		
8	Select attribute ' Sensor ' and value " ASTER ". Press ' OK '.	The attribute is selected and the value is entered.		
9	Select attribute 'Temporal' and values " start: 08/15/2001, end: 09/30/2002 ". Press ' OK '.	The attributes is selected and the start/end value is entered.		

10	Compare the search request to the federated schema and the LIM and Data Server schema to identify which schema will be accessed.	The applicable schema are identified.		
11	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
12	During the search request process, verify that a Distributed Query Plan (DQP) is generated and that the plan's progress is being monitored.	The DQP was generated and the plan's progress was monitored.	S-DMS-10030, S-DMS-10050	
13	Verify that the search result set contains the correct data.	The result set contains the correct data.		
14	Verify that the correct LIMs and Data Servers are listed in the DQP.	The plan is correct.	S-DMS-10040	
15	Exit the search tool.	The search tool is exited.		

5.1.4.4.5 Test Case 5: DIM Time Operations Test (T231-40.01.05)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure the database contents are known.	The database contents are identified in detail.	Data.	
2	Perform a time-intensive database administrative activity (i.e. database backup).	The activity is started and acknowledgment is received.		
3	Interrupt the activity for one minute.	Acknowledgment of the interruption is received.	S-DMS-10460	
4	Restart the activity.	The activity completes and a message is displayed indicating completion.		
5	Restore the backup to an empty database.	The database is restored.		
6	Verify that the schema and contents of the backed up database match the contents of the restored database.	The databases match.	S-DMS-10460	
7	Start the time-intensive database administrative activity again.	The activity is started.		
8	Abort the operation.	The operation is aborted and a message is displayed indicating the abort.	S-DMS-10100	
9	Ensure that the operation was actually aborted by performing the 'ps' command and that the system returns to normal operating condition.	The process is not found and the system operates as normal.		

10	Perform a time-intensive maintenance activity.	The activity is started and acknowledgment is received.		
11	Interrupt the activity for one minute.	Acknowledgment of the interruption is received.	S-DMS-10460	
12	Restart the activity.	The activity completes and a message is displayed indicating completion.		
13	Verify that there was no loss of data during that interruption.	No data was lost.	S-DMS-10460	
14	Start the maintenance activity once again.	The activity is restarted and acknowledgment is received.		
15	Cause a processing failure.	The system is shutdown ungracefully.		
16	Restart processing.	The system is restarted and brought back into operational mode.		
17	Verify that the maintenance activity completes.	The activity completes and a message is displayed indicating completion.	S-DMS-10120	
18	Verify that the correct operations were performed without loss of data.	The correct operations were performed without loss of data.	S-DMS-10120	

5.1.4.4.6 Test Case 6: DIM Summary Report Test (T231-40.01.06)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure data exists to support report generation.	The data exists.	Data.	
2	Logon as an operator.	The user is logged on.		
3	Generate daily DIM operations summary reports.	The reports are generated and messages are sent indicating completion of all reports.	S-DMS-10385	
4	Print the reports.	Hardcopies of the reports are generated.		
5	Verify that the reports contain the correct data.	The correct data is contained in the reports.		
6	Generate DIM performance reports.	The reports are generated and messages are sent indicating completion of all reports.	S-DMS-10386	
7	Print the reports.	Hardcopies of the reports are generated.		
8	Verify that the reports contain the correct data.	The correct data is contained in the reports.		
9	Create utilization reports.	The reports are generated and messages are sent indicating completion of all reports.	S-DMS-10555	
10	Print the reports.	Hardcopies of the reports are generated.	S-DMS-10556	

11	Verify that the reports contain the correct data.	The correct data is contained in the reports.		
12	Forward the utilization reports electronically to an external entity.	The report is distributed and a message indicating distribution is displayed.	S-DMS-10556	
13	Select the option to transfer the reports to electronic media.	The user is prompted to load the media.		
14	Perform the transfer.	The reports are transferred to the media and ready for distribution.	S-DMS-10556	
15	Logoff.	The user is logged off.		

5.1.4.4.7 Test Case 7: DIM Instrument Inventory Search Response Time (T231-40.01.07)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure data exists to support a multiple DAAC, single or multiple instrument search and to create a single or multiple instrument inventory result set.	The data exists.	Data.	
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type “ Inventory ”.	The type is selected.		
6	Prepare a multiple DAAC, single instrument inventory search request consisting of multiple keyword attributes with spatial range check.	The search request is prepared.		
7	Select the ‘Submit Search’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		

8	Verify that the DIM accepts the search request from the client with an appropriate response time as stated in Appendix E by checking a predetermined measurement variable.	The response time is appropriate.	S-DMS-10470	
9	Verify that the DIM processes the search request with an appropriate response time as stated in Appendix E by checking a predetermined measurement variable.	The response time is appropriate.	S-DMS-10470	
10	Verify that the DIM distributes the search request to the LIMs with an appropriate response time as stated in Appendix E by checking a predetermined measurement variable.	The response time is appropriate.	S-DMS-10470	
11	Verify that the DIM accepts from LIMs a multiple DAAC, single instrument inventory search result set consisting of multiple keyword attributes with spatial range check, integrates the result set and provides a complete result set.	The result set returned is accepted, integrated and formulated into a complete result set.	S-DMS-10490	
12	Prepare a multiple DAAC, multiple instrument inventory search request consisting of multiple keyword attributes with time range check.	The search request is prepared.		

13	Select the 'Submit Search' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
14	Verify that the DIM accepts the search request from the client with an appropriate response time as stated in Appendix E by checking a predetermined measurement variable.	The response time is appropriate.	S-DMS-10480	
15	Verify that the DIM processes the search request with an appropriate response time as stated in Appendix E by checking a predetermined measurement variable.	The response time is appropriate.	S-DMS-10480	
16	Verify that the DIM distributes the search request to the LIMs with an appropriate response time as stated in Appendix E by checking a predetermined measurement variable.	The response time is appropriate.	S-DMS-10480	
17	Verify that the DIM accepts from LIMs a multiple DAAC, multiple instrument inventory search result set consisting of multiple keyword attributes with time range check, integrates the result set and provides a complete result set.	The result set returned is accepted, integrated and formulated into a complete result set.	S-DMS-10500	
18	Exit the search tool.	The search tool is exited.		

5.1.4.5 Enhanced Data Dictionary Thread IA (T231-51.01)

5.1.4.5.1 Test Case 1: Send and Accept Request Test (T231-51.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Log on to the ECS workstation	Successful log on to ECS workstation.	S-DMS-20130, S-DMS-20140	
2	Invoke the Data Dictionary (DDT) GUI.	The DDT will be invoked.		
3	Type keywords in combination of Earth Science data types, core metadata attribute and product specific metadata			
4	Click ' Submit ' to submit the search.	The data dictionary server will accept the search.	-	
5	Click on each hyperlinked word to see detail description or definitions.	The Data Dictionary server will accept the search requests. The client will display the search result.		
6	Enter a keyword for Earth Science data type description.			
7	Click ' Submit ' to submit the request.	The data dictionary server will accept the search.		
8	Click on each hyperlinked word to see the definitions.	The client will display the search result.		

9	Enter keywords for core metadata attribute definitions.			
10	Click ' Submit ' to submit the request.	The data dictionary server will accept the search.		
11	Enter keywords for product specific metadata attribute definitions.			
12	Click 'Submit' to submit the request.	The data dictionary server will accept the search.		
13	Click on each hyperlinked word to see the definitions.	The client will display the search result.		
14	Log-off the ECS workstation.			

5.1.4.5.2 Test Case 2: Decompose Search Request (T231-51.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Log-on to the ECS workstation as an administrator.	Successful log-on to ECS		
2	Invoke the Data Dictionary GUI.			
3	Enter a key word for search.			
4	Click ' Submit ' to submit the search.	<p>The Data Dictionary server will accept the request.</p> <p>The data dictionary server decomposes the search request into executable data bases queries.</p> <p>Note: The decomposition of the data base search requests into executable data base queries is transparent to the user.</p> <p>The client will display the search result.</p>	S-DMS-20240, S-DMS 20880	
5	<p>Remotely log-on to the sybase client.</p> <p>Note: Setup the environment to access the SQL server.</p>			

6	Access the SQL server (i.e. Milo) by entering the following command: isql -Username -Ppassword	This command will allow the user to enter the database facility.		
7	Enter SQL command to select the name of the database. use <database_name>			
8	Enter SQL statements to manipulate disk space and memory usage and submit the request.	The DDICT will accept the data administration requests.		
9	Enter SQL statements to grant and revoke permission to execute create database statements	The DDICT will accept the data administration requests.		
10	Run diagnostic and repair functions that read data pages or recover data and indexes.	The DDICT will accept the data administration requests.		
11	Log-off the ECS workstation.			

5.1.4.5.3 Test Case 3: Valid Values for Data Elements (T231-51.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Log-on to the ECS workstation as an administrator.	Successful log-on to ECS	S-DMS-20890, S-DMS 20910	
2	Invoke the ESST GUI.			
3	Construct searches with valid values for data elements and submit the searches	The Data Dictionary server will accept the search request. The client will display the search result on the result screen.		
4	Construct searches with invalid values for data elements and submit them.	The Data Dictionary server will respond with error message. The client will display the error message.		
5	Log-off the ECS workstation.			

5.1.4.6 Enhanced Data Dictionary Thread IB T231-52.01)

5.1.4.6.1 Test Case 1: Geophysical Parameter Functions (T231-52.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Log-on to the ECS workstation as an ECS user.	Successful log-on to ECS		
2	Invoke the Data Dictionary GUI			
3	Enter a keyword for descriptive information associated with the geophysical parameter.			
4	Click ' Submit ' to submit the search.	The Data Dictionary server will accept the request.		
5	Click on each hyperlinked word at a time.	The client will display the requested information		
6	Enter a keyword for descriptive information associated with a data collection.			
7	Click ' Submit ' to submit the search.	The Data Dictionary server will accept the request.		
8	Click on each hyperlinked word at a time.	The client will display the requested information		

9	Enter a keyword for descriptive information associated with an instrument.			
10	Click ' Submit ' to submit the search.	The Data Dictionary server will accept the request.		
11	Click on any hyperlinked word.	The client will display the requested information		
12	Click on the " Data Collection "	The client will display the requested information		
13	Click on a hyperlinked word	The client will display the requested information		
14	Click the icon for Data Dictionary.	The home page for DDT will be displayed.		
15	Click on the " Instrument "	The Data Dictionary server will accept the request. The client will display the Instrument Index listing.		
16	Click on any hyperlinked word.	The Data Dictionary server will accept the request. The client will display the information on that instrument.		

17	Click the icon for Data Dictionary icon	The home page for DDT will be displayed.		
18	Click on the “Parameter group”	The Data Dictionary server will accept the request. The client will display the Instrument Index listing		
19	Click on any hyperlinked word.	The Data Dictionary server will accept the request. The client will display the requested information		
20	Click the icon for Data Dictionary icon	The home page for DDT will be displayed.		
21	Click on the “Parameter Topic.”	The Data Dictionary server will accept the request. The client will display the Parameter Topic listing		

22	Click on any hyperlinked word.	<p>The Data Dictionary server will accept the request.</p> <p>The client will display the requested information</p>		
23	Click the icon for Data Dictionary icon	The home page for DDT will be displayed.	The data dictionary stores the correct mapping of geophysical parameters to the appropriate instrument and collection . The user receives a valid mapping of geophysical parameters to the appropriate instrument and collection. The user receives a valid descriptive information about keywords associated with a collection.	
24	Log-off the ECS workstation.			

5.1.4.6.2 Test Case 2: DD Entries (DS/LIM/DIM) (T231-52.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1.	Log-on to the ECS workstation as an ECS administrator.	Successful log-on to ECS		
2.	Invoke the Data Dictionary GUI		This test will verify the administrator's capabilities to view the data dictionary entries based on Earth Science data types through different means such as the data server, LIM and DIM. In addition, it will verify the capability to view data dictionary schema and to define a global view of DD entries based on Earth Science data types	
3.	Enter a keyword based on Earth Science data types.			
4.	Click ' Submit ' to submit the request.	The Data Dictionary server will accept the request. The client will display the data dictionary entry.		

5.	Enter a keyword based on Earth Science data types.	<p>The Data Dictionary server will accept the request.</p> <p>The client will display the data dictionary entry.</p> <p>A log will record this event.</p>		
6.	Click ' Submit ' to submit the search.	<p>The Data Dictionary server will accept the request.</p> <p>The client will display the data dictionary entry.</p>		
7.	Type a keyword (i.e. ERBE) to see the definition for Earth Science data type.			
8.	Click ' Submit ' button to submit the search request.	<p>The Data Dictionary server will accept the request.</p> <p>The client will display the data dictionary entry.</p>		
9.	Enter a keyword based on Earth Science data type.			

10.	Click 'Submit' button to submit the search request.	<p>The DDICT will accept the request.</p> <p>The administration log will contain definition of global view of DD entries based on earth science data types through the data server</p> <p>A log will record this event.</p>		
11.	Enter the following on the command line: isql -U -P username password use <database name> go	<p>The DDICT will accept the request.</p> <p>The client will display the data dictionary schema.</p>		
12.	Enter the following on the command line: sp_help <tabler name> go	<p>The DDICT will accept the request.</p> <p>The client will display the data dictionary schema.</p> <p>A log will record this event.</p>		
13.	Log-off the ECS workstation.			

5.1.4.6.3 Test Case 3: Global DD Test (T231-52.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Log-on to the ECS workstation as an ECS administrator.	Successful log-on to ECS		
2	Invoke the ESST GUI.			
3	Construct a search to see a global view of Data Dictionary entries based on Earth Science Data Types and submit the search.	The client will accept the request. The client will display the data dictionary entry. A log will record this event.		
4	Construct a search to see variations within data dictionaries entries based on data context and instrument and submit the search.	The client will accept the request. The client will display the data dictionary entry. A log will record this event.		
5	Construct a search to see a consistent view of data dictionary entries based on the value given for an attribute and submit the search.	The client will accept the request. The client will display the data dictionary entry. A log will record this event.		
6	Log-off the ECS workstation.			

5.1.4.7 Gateway Thread IA (T231-61.01)

5.1.4.7.1 Test Case 1: Inventory Search Test (T231-61.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Log on to the ECS workstation	Successful log on to ECS workstation.		
2	Invoke the ECS desktop by typing “EcsDesktop”	The desktop will be invoked.		
3	Double-click on the icon for Earth Science Search Tool (ESST) .	The ESST will be invoked.		
4	Construct an inventory search request for V0 IMS server.	<p>V0 IMS successfully receive the requests from ECS.</p> <p>ECS client successfully displays the search results.</p> <p>The gateway log contains a valid entry for each request</p>	<p>The successful transmission of messages between ECS and V0 systems implies that ECS protocol successfully converted messages for V0 system and vice versa.</p> <p>The successful transmission of messages between ECS and V0 system implies that the gateway supported two-way level 3 catalog interoperability, as defined by the CEOS for the interface between the ECS and V0.</p>	

5	Construct an inventory search request for National Oceanic and Atmospheric Administration (NOAA) SAA.	<p>NOAA SAA successfully receive the requests from ECS.</p> <p>ECS client successfully displays the search results.</p> <p>The gateway log contains a valid entry for each request</p>	The successful transmission of messages between ECS and NOAA SAA system implies that the gateway supported two-way level 2 or 3 catalog interoperability, as defined by the CEOS for the interface between the ECS and NOAA SAAs.	
6	Remotely log-on to the NOAA SAA from another window on ECS workstation.	Successful log-on to NOAA SAA		
7	Invoke an applicable GUI on NOAA SAA window and submit inventory search requests to V0 IMS server.	<p>V0 IMS successfully receive the requests from NOAA SAA.</p> <p>NOAA SAA client successfully displays the search results.</p> <p>The gateway log contains a valid entry for each request</p>		
8	Enter exit on each window and log-off the ECS workstation.			

5.1.4.7.2 Test Case 2: Browse Request Test (T231-61.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	Log on to the ECS workstation	Successful log on to ECS workstation.	S-DMS-30340, S-DMS-30345, S-DMS-30680, S-DMS-30690 and S-DMS-30695	
2	Invoke the ECS desktop by “EcsDesktop”	The desktop will be invoked.		
3	Double-click on the icon for Earth Science Search Tool (ESST) .	The ESST will be invoked.		
4	Submit browse requests to V0 IMS server.	<p>V0 IMS successfully receive the requests from ECS.</p> <p>ECS client successfully displays the results.</p> <p>The gateway log contains a valid entry for each request.</p>		

5	Submit browse requests to NOAA SAA.	<p>NOAA SAA successfully receive the requests from ECS.</p> <p>ECS client successfully displays the results.</p> <p>The gateway log contains a valid entry for each request</p>		
6	Remotely log-on to the NOAA SAA from another window on ECS workstation.	Successful log-on to NOAA SAA		
7	Invoke an applicable GUI on NOAA SAA window and submit browse requests to V0 IMS.	<p>V0 IMS successfully receive the requests from NOAA SAA.</p> <p>NOAA SAA client successfully displays the search results.</p> <p>The gateway log contains a valid entry for each request</p>		
8	Remotely log-on to the V0 IMS from another window on ECS workstation.	Successful log-on to V0 IMS.		

9	Invoke an applicable GUI on V0 IMS window and submit browse requests to ECS	<p>ECS successfully receive the requests from V0 IMS.</p> <p>ECS client successfully displays the search results.</p> <p>The gateway log contains a valid entry for each request</p>		
10	Enter exit on each window and log-off the ECS workstation.			

5.1.4.7.3 Test Case 3: Product Request Test (T231-61.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Log on to the ECS workstation	Successful log on to ECS workstation.		
2	Invoke the ECS desktop by typing “EcsDesktop”	The desktop will be invoked.		
3	Double-click on the icon for Earth Science Search Tool (ESST) .	The ESST will be invoked.		
4	Submit product requests to V0 IMS server.	V0 IMS will successfully receive the requests from ECS. ECS client will successfully receive product delivery status from V0 IMS. The gateway log contains a valid entry for each request.		

5	Submit product requests to NOAA SAA.	<p>V0 IMS will successfully receive the requests from ECS.</p> <p>ECS client will successfully receive product delivery status from NOAA SAA.</p> <p>The gateway log contains a valid entry for each request.</p>		
6	Send a request for product delivery status to NOAA SAA.	<p>NOAA SAA will successfully receive the requests from ECS.</p> <p>The gateway log contains a valid entry for each request</p>		
7	Submit product availability queries to NOAA NMC.	<p>NOAA NMC will successfully receive the requests from ECS.</p> <p>The gateway log contains a valid entry for each request</p>		
8	Remotely log-on to NOAA SAA from another window on ECS workstation.	Successful log-on to NOAA SAA		

9	Invoke an applicable GUI on NOAA SAA window and submit product requests to ECS.	ECS will successfully receive the requests from NOAA SAA. The gateway log contains a valid entry for each request		
10	Enter exit on each window and log-off the ECS workstation.			

5.1.4.7.4 Test Case 4: Cost Estimate Test(T231-61.01.04)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Log on to the ECS workstation	Successful log on to ECS workstation.		
2	Invoke the ECS desktop by typing “EcsDesktop”	The desktop will be invoked.		
3	Invoke an appropriate GUI.	The ESST will be invoked.		
4	Send an authentication request to NOAA SAA.	NOAA SAA will successfully receive the requests from ECS. NOAA SAA will send the authentic information to ECS The gateway log contains a valid entry for each request.		
5	Send cost estimate requests.	NOAA SAA will successfully receive the requests from ECS. The gateway log contains a valid entry for each request.		

6	Send ancillary data requests to the NOAA NMC.	NOAA NMC will successfully receive the requests from ECS. The gateway log contains a valid entry for each request.		
7	Remotely log-on to NOAA SAA from another window on ECS workstation.	Successful log-on to NOAA SAA		
8	Invoke an applicable GUI on the NOAA SAA window and send an authentication request to ECS.	ECS will successfully receive the requests from NOAA SAA. The gateway log contains a valid entry for each request.		
9	Send cost estimate requests.	ECS will successfully receive the requests from NOAA SAA. The gateway log contains a valid entry for each request.		
10	Enter exit on each window and log-off the ECS workstation.			

5.1.4.7.5 Test Case 5: Guide Query Test (T231-61.01.05)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Log on to the ECS workstation	Successful log on to ECS workstation.		
2	Invoke the ECS desktop by typing “EcsDesktop”	The desktop will be invoked.		
3	Double-click on the icon for Earth Science Search Tool (ESST) .	The ESST will be invoked.		
4	Construct a guide query for V0 IMS.			
5	Submit the guide query to NOAA SAA.	NOAA SAA will successfully receive the query from ECS. ECS will successfully receive the guide query results. The gateway log contains a valid entry for each request.		
6	Remotely log-on to V0 IMS from another window on ECS workstation.	Successful log-on to V0 IMS		
7	Invoke the ESST GUI on the ECS window and construct a guide query for ECS.			

8	Submit the guide query to ECS.	<p>V0 IMS will successfully receive the query from ECS.</p> <p>ECS will successfully receive the guide query results.</p> <p>The gateway log contains a valid entry for each request.</p>		
9	Enter exit on each window and log-off the ECS workstation.			

5.1.4.8 Gateway Thread IB (T231-62.01)

5.1.4.8.1 Test Case 1: DAR Parameters Test (T231-62.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Log on to the ECS workstation	Successful log on to ECS workstation.		
2	Invoke the ECS desktop by typing “EcsDesktop”	The desktop will be invoked.		
3	Double-click on the icon for DAR.	The DAR will be invoked.		
4	User enters DAR parameters	CLS accepts DAR parameters	S-DMS-20900, S-DMS-23910	
5	User requests higher level processing	DAR client queries ADSRV for possible L2 products		
6	User selects L2 products to be generated upon arrival of L1b			
7	User inputs runtime parameters for each selected L2 product	CLS accepts runtime parameters		
8	User submits DAR	CLS submits DAR to ASTER GDS. GDS processes DAR and returns a DAR ID. CLS receives DAR ID		
9	User requests DAR status	CLS requests DAR status. GDS returns DAR status. CLS displays DAR status.		

10	Logoff the workstation			
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5.1.4.8.2 Test Case 2: Gateway Log Test (T231-62.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Login to a DAAC MSS Server workstation (HP) in the EDF as an administrator			
2	Initialize the HP OpenView application: Type: cd /usr/OV/bin Type: ovw &	OpenView application opened		
3	From the “ Options ” pull down menu, select “ Logs ”			
4	Select DMS application			
5	Verify that initiation of a session is in the log			
6	Verify that termination of a session is in the log			
7	Verify that resumption of previously suspended session is in the log			
8	Verify that suspension of processing of service requests			
9	Verify that initiation of a session is in the log			
10	Verify that startup of the gateway server			

11	Verify that shutdown of the gateway server			
12	Verify log to MSS when service requested is activated from the queue		S-DMS-30910, S-DMS-30920, S-DMS-30930, S-DMS-30940, S-DMS-31020, S-DMS-31030, S-DMS-31011, S-DMS-31012, S-DMS-31013, S-DMS-31014, S-DMS-31015, S-DMS-31016, S-DMS-31017, S-DMS-31018	
13	Close the OpenView windows			
14	Logoff the workstation			

5.1.4.8.3 Test Case 3: Event Notification Test (T231-62.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Login to a DAAC MSS Server workstation (HP) in the EDF as an administrator			
2	Initialize the HP OpenView application: Type: cd /usr/OV/bin Type: ovw &	OpenView application opened		
3	Double click on the “EDF” icon			
4	From the “options” pull down menu, select <Data Collection>			
5	Enter the source. Then click the “ADD” button to add this source in the “list of collection sources”			
6	Change the “Collection Mode” to <Store, Check Threshold>			
7	Change the “Polling Interval” to <5s>			
8	Change the “Trap Number” to <xxxx> Note: the trap number must be an odd number in the range 1001 - 1999			

9	Change the values in the “Threshold” and “rearm” boxes to two greater than the number of users currently on the system.			
10	Change the “ instances ” to < all >			
11	Click on the < Configure Event >			
12	Click on “ Event ” in the Event Categories window to review the events.			
13	Enter Mailx on one of the workstations			
14	Enter: n (until desired message is read)			
15	Double click on “ show data ”			
16	Click on “ graph ”			
17	In the OpenView Grapher window click on “ view ” and select statistics.			
18	Verify notifications of events associated with sessions			
19	Verify notifications of events associated with service requests which require additional instructions.			
20	Verify disabled asynchronous notification and provided instructions			
21	Verify acceptance of notification events			

22	Verify acceptance of instructions associated with responses to notifications of events			
23	Logoff the workstation			

5.1.4.8.4 Test Case 4: Gateway Status Report to MSS (T231-62.01.04)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Login to a DAAC MSS Server workstation (HP) in the EDF as an administrator			
2	Initialize the HP OpenView application: Type: cd /usr/OV/bin Type: ovw &	Open View application opened		
3	Double click on the “ EDF ” icon			
4	From the “options’ pull down menu, select < Status Report >			
5	Click on the < Configure Status >			
6	Click on “ Status Event ” in the Event Categories window to review the events.			
7	Enter Mailx on one of the workstations			
8	Enter: n (until desired message is read)			
9	Double click on “ show data ”			
10	click on “ graph ”			
11	In the OpenView Grapher window click on “ view ” and sttus report statistics.			

12	Verify hardware and software fault information is sent to MSS			
13	Verify Configuration Management data such as software version has been provided to MSS			
14	Verify Configuration Information has been provided to MSS			
15	Verify integration, testing and simulation status has been provided to MSS			
16	Verify training information has been provided to MSS			
17	Verify logistics information has been provided to MSS		S-DMS-31051, S-DMS-31052, S-DMS-31057, S-DMS-31058, S-DMS-31059, S-DMS-31061, S-DMS-31062	
18	Logoff the workstation			

5.1.4.8.5 Test Case 5: Gateway Data Management Collection Test (T231-62.01.05)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Login to a DAAC MSS Server workstation (HP) in the EDF as an administrator			
2	Initialize the HP OpenView application: Type: cd /usr/OV/bin Type: ovw &	OpenView application opened		
3	Double click on the “ EDF ” icon			
4	From the “options’ pull down menu, select < Data Collection >			
5	Enter the source. Then click the “ ADD ” button to add this source in the “list of collection sources”			
6	Change the “ Polling Interval ” to < 5s >			
7	Change the “ Trap Number ” to < xxxx > Note: the trap number must be an odd number in the range 1001 - 1999			
8	Enter Mailx on one of the workstations			
9	Enter: n (until desired message is read)			
10	Double click on “ show data ”			

11	click on “ graph ”			
12	In the OpenView Grapher window click on “ view ” and select statistics.			
13	Verify performance management data is provided to MSS at the configurable intervals and on demand			
14	Verify resource utilization is being provided to MSS in collecting accounting management data.			
15	Verify security management data is provided to MSS		S-DMS-31053, S-DMS-31054, S-DMS-31056	
16	Logoff the workstation			

5.1.4.8.6 Test Case 6: Generate Gateway Summary Reports (T231-62.01.06)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Login to a DAAC MSS Server workstation (HP) in the EDF as an administrator			
2	Initialize the HP OpenView application: Type: cd /usr/OV/bin Type: ovw &	Open View application opened		
3	Double click on the “ EDF ” icon			
4	From the “options’ pull down menu, select < Summary Collection >			
5	Enter the source. Then click the “ ADD ” button to add this source in the “list of collection sources”			
6	Change the “ Polling Interval ” to < 5s >			
7	Change the “ Trap Number ” to < xxxx > Note: the trap number must be an odd number in the range 1001 - 1999			
8	Enter Mailx on one of the workstations			
9	Enter: n (until desired message is read)			
10	Double click on “ show data ”			

11	click on “ graph ”			
12	In the OpenView Grapher window click on “ view ” and select statistics.			
13	Create utilization reports			
14	Distribute them in an interval of <5s> to specified list of recipients			
15	Distribute gateway utilization reports through email.			
16	Distribute gateway utilization reports through hard-copy			
17	Create gateway operations summary reports			
18	Create gateway performance summary reports			
19	Logoff the workstation			

5.1.4.9 Data Access Service I (B231.01)

5.1.4.9.1 Test Case 1: Verify LIM 1 Functions (B231.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	Log-on to the ECS workstation as an ECS administrative personel.	Successful log-on to ECS		
2	Remotely log-on to the sybase client. Note: Setup the environment to access the SQL server.			
3	Access the SQL server (i.e. Milo) by entering the following command: isql -Username -Ppassword	This command will allow the user to enter the database facility.		
4	Enter: sp-help	The sybase client will display the size, owner, database ID, creation date and option settings.		
5	Enter: sp-help <database_name>	The sybase client will display about a specified database..		
6	Enter SQL command to select the name of the database. use <database_name>			

7	<p>Update to an existing row in the existing table by entering the following T-SQL statements</p> <p>update <table_name> set <column_name1> = <expression1></p>	<p>The LIMGR will accept the request and update the table in the primary and secondary databases.</p> <p>It will log the entry for the change.</p>	<p>Backup is a process of creating a copy of the database on a separate storage device.</p>	
8	<p>Enter SQL statements to insert the row in the existing table:</p> <p>insert <database_name></p>	<p>The sybase server will add a row to an existing table.</p>		
9	<p>Enter SQL statements to insert the data in the existing table:</p> <p>insert <database_name> select row_no from <table_name></p>	<p>The sybase server will insert data in the existing table.</p>		
10	<p>Enter SQL statements to delete row(s) in the existing table:</p> <p>delete <database_name> where <column_name> != <item_name></p>	<p>The sybase server will update an existing table.</p>		

11	<p>Enter SQL statements to delete data from the existing table:</p> <p>delete <database_name></p> <p>where</p>	The sybase server will update an existing table.		
12	<p>View the change in the primary database by entering a following query:</p> <p>select <> <> <></p> <p>from <> <></p> <p>go</p>	The client will display the correct changes in the table.		
13	<p>View the change in the primary database by entering a following query:</p> <p>select <column_name1></p> <p>from <table_name></p> <p>go</p>	The client will display the correct change in the table.		

14	<p>Access to the backup database and view the change by entering a following query:</p> <pre> select <column_name1> from <table_name> go </pre>	<p>The client will display the correct change in the table.</p>		
15	<p>Submit a query by entering the following T-SQL statements:</p> <pre> select <c o l u m n _ n a m e 1 > <column_name2> from <table_name> go </pre>	<p>The client will display the correct change in the table.</p> <p>The LIMGR will accept the search requests and determine which data servers are required to perform a search request and build a site query plan as a result.</p> <p>The client will display search results</p>	<p>Search format should be compatible to the ESQL format (refer to Appendix A of the ECS requirement document 304).</p>	
16	Invoke the ESST GUI.			
17	Click on the 'Search type' and select the 'Inventory'			

18	Click on the icon for 'Sensor' and select the instrument name(s)	The instrument name(s) will appear in the 'Discrete Attribute summary'		
19	Click on the icon for 'Platform' and select the platform name(s)	The instrument name(s) will appear in the 'Discrete Attribute summary'		
20	Click on the icon for 'Spatial' and select the region with the mouse	A window for Time line will pop up. Lat and long information on the specified region will appear in the 'Discrete Attribute summary'		
21	Click on the icon for 'Temporal' and select the time line	A window for Time line will pop up. Start and end times will appear in the 'Discrete Attribute summary'		
22	Submit the search.	The LIMGR will accept the search requests and display results received from more than one server.	Analyze the search result to ensure that LIM integrated the search result from different servers.	
23	Browse the partial result and save it.			
24	Click on the 'Search type' and select the 'Advertising'			

25	Click on the icon for 'Sensor' and select the instrument name(s)	The instrument name(s) will appear in the 'Discrete Attribute summary'		
26	Click on the icon for 'Spatial' and select the region with the mouse	A window for Time line will pop up. Lat and long information on the specified region will appear in the 'Discrete Attribute summary'		
27	Click on the icon for 'Temporal' and select the time line	A window for Time line will pop up. Start and end times will appear in the 'Discrete Attribute summary'		
28	Submit the search.	The LIMGR will accept the search requests and display result.		
29	Click on the 'Search type' button and select the 'Inventory' search type			
30	Construct a search for data from the science discipline.			
31	Submit the search.	The LIMGR will accept the search request. The client will display the known data from the specified science discipline.		

32	Browse the partial result and integrate with the previous result.			
33	Construct a search for data granules of EOSDIS data.			
34	Submit the search.	<p>The LIMGR will accept the search requests for all specified data servers.</p> <p>The client will display the known data from the specified science discipline.</p>		
35	Click on 'Search type' to select 'Data Dictionary'			
36	Select an icon for 'Platform'			
37	Click on a few platform names and click the 'OK' button.			
38	Click on the 'Submit Search' button	<p>The LIMGR accepts the requests.</p> <p>The client will display the search results</p>		
39	Click on 'Search type' to select 'Advertising'			
40	Select an icon for 'Sensor'			
41	Click on a few instrument names and click the 'OK' button.			
42	Click on the 'Submit Search' button	<p>The LIMGR accepts the requests.</p> <p>The client will display the search results</p>		

43	Click on 'Search type' to select 'Guide'			
44	Select an icon for 'Topic Parameter'			
45	Click on a few parameter names and click the 'OK' button.			
46	Click on the 'Submit Search' button	<p>The LIMGR accepts the requests.</p> <p>The client will display the search results</p>		
47	Log-off the ECS workstation.			

5.1.4.9.2 Test Case 2: Verify DIM 1 Functions (B231.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1.	Log on to the ECS workstation	Successful log on to ECS workstation.		
2.	Invoke the advertising service tool from the ECS desktop			
3.	Submit a request to subscribe advertised data at a local site	The LIMGR will accept the subscription.		
4.	Submit a request to subscribe the advertised data at various DAACs.	The DIMGR will accept the subscription.		
5.	Invoke the ESST GUI from the ECS desktop..	The ESST will be invoked.		

6.	<p>Submit a search request for all the sea surface temperature and Humidity data over the Atlantic ocean from January 1, 1990 to January 1, 1995</p>	<p>The ESST sends the search request to the DIM.</p> <p>The DIM decomposes the query and creates a query plan. The plan is to execute the three subqueries in parallel since they are three independent versions of the original query.</p> <p>The DIM creates a session with each server.</p> <p>The DIM creates a result set object that will hold the combined results of the three subqueries.</p> <p>The DIM issues the three subqueries to the servers.</p> <p>As each server search request is complete, the DIM extracts the results of each sub query.</p> <p>When all of the subqueries are complete, the DIM combines the results of the individual queries and extracts the attributes specified in the original request.</p>	<p>This search results in a union of searches to three data servers.</p>	
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7.	<p>Submit a search request for all the sea surface temperature and Humidity data over the Atlantic ocean from January 1, 1990 to January 1, 1995 where the humidity and sea surface data is coincident in time and space.</p>	<p>The ESST sends the search request to the DIM.</p> <p>The DIM decomposes the query and creates a query plan and send it to the LIM.</p> <p>The LIM decomposes the query and creates a query plan and send it to the LIM.</p> <p>The LIM decomposes the query creates a query plan. The plan is to execute the two subqueries in parallel and then perform the coincident comparison operation.</p> <p>The LIM creates a session with each server.</p> <p>The LIM creates a result set object that will hold the combined results of the two subqueries.</p> <p>The LIM issues the two subqueries to the servers as search requests.</p> <p>As each server search request is complete, the LIM extracts the results of</p>	<p>This search results in a union of searches to three data servers.</p> <p>The DIM will accept and process the search request within an appropriate response time.</p> <p>The DIM will distribute the search request to LIM within an appropriate response time.</p> <p>The DIM will accept search result from LIM within an appropriate response time</p>	
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8	Construct a time-intensive search request and submit the search.	The search request will be accepted.		
9	Cancel the search request.	The operation is aborted and a message is displayed indicating the abort.		
10	Generate daily operations summary reports.	The reports are generated and messages are sent indicating completion of all reports.		
11	Generate performance reports.	The reports are generated and messages are sent indicating completion of all reports.		
12	Generate utilization reports.	The reports are generated and messages are sent indicating completion of all reports.		
13	Forward the utilization reports electronically to an external entity.	The report is distributed and a message indicating distribution is displayed.		
14.	Log-off the ECS workstation.			

5.1.4.9.3 Test Case 3: Verify Enhanced DD 1 Functions (B231.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1.	Log on to the ECS workstation	Successful log on to ECS workstation.		
2.	Invoke the Data Dictionary (DDT) GUI.	The DDT will be invoked.		
3.	Type keywords in combination of Earth Science data types, core metadata attribute and product specific metadata			
4.	Click ' Submit ' to submit the search.	<p>The Data Dictionary server will accept the request.</p> <p>The data dictionary server decomposes the search request into executable data bases queries.</p> <p>Note: The decomposition of the data base search requests into executable data base queries is transparent to the user.</p> <p>The client will display the search result.</p>	-	
5.	Click on each hyperlinked word to see detail description or definitions.	<p>The Data Dictionary server will accept the search requests.</p> <p>The client will display the search result.</p>		

6.	Enter a keyword for Earth Science data type description.			
7.	Click 'Submit' to submit the request.	The data dictionary server will accept the search.		
8.	Click on each hyperlinked word to see the definitions.	The client will display the search result.		
9.	Enter keywords for core metadata attribute definitions.			
10.	Click 'Submit' to submit the request.	The data dictionary server will accept the search.		
11.	Enter keywords for product specific metadata attribute definitions.			
12.	Click 'Submit' to submit the request.	The data dictionary server will accept the search.		
13.	Click on each hyperlinked word to see the definitions.	The client will display the search result.		
14.	Remotely log-on to the sybase client. Note: Setup the environment to access the SQL server.			
15.	Access the SQL server (i.e. Milo) by entering the following command: isql -Username -Ppassword	This command will allow the user to enter the database facility.		

16.	Enter SQL command to select the name of the database. use <database_name>			
17.	Enter SQL statements to manipulate disk space and memory usage and submit the request.	The DDICT will accept the data administration requests.		
18.	Enter SQL statements to grant and revoke permission to execute create database statements	The DDICT will accept the data administration requests.		
19.	Run diagnostic and repair functions that read data pages or recover data and indexes.	The DDICT will accept the data administration requests.		
20.	Construct searches with valid values for data elements and submit the searches	The Data Dictionary server will accept the search request. The client will display the search result on the result screen.		
21.	Construct searches with invalid values for data elements and submit them.	The Data Dictionary server will respond with error message. The client will display the error message.		
22.	Log-off the ECS workstation.			

5.1.4.9.4 Test Case 4: Verify Enhanced Data Service Functions (B231.01.04)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Using a network browser, enter the URL for the Earth Science On-line Directory Administration and Moderation Home Page	Verify that the Earth Science On-line Directory Administration and Moderation Home Page appears		
2	Select the “Administratiion” icon located at the bottom of the page			
3	Select “Create a Moderation Group”	Verify that the Create Group home page appears		
4	Enter “ Acid Rains ”			
5	Enter “ Acid Rain is deadly” in the Description field			
6	Enter “ Tester 1 ” in the Moderator field			
7	Enter “ 20 ” in the Provider ID field			
8	Enter “ 10 ” and “ 30 ” in the Application Service ids			
9	Enter “ Tester 2 ” in the ECS User name field			
10	Enter < acl password > in the ECS password field			

11	Select “Submit” located at the bottom of the page	Verify the “Polluted Water for Update” Moderation Queue home page is returned		
12	Select “Display selected request” is returned	Verify that “Moderate Data” home page is returned		
13	Review the Comments to moderator from contributor			
14	Select “ accept request ”	Verify that notification is returned “stating that your request was accepted		
15	Perform a backup of the database			
16	Dump the database			
17	Restore the database	Verify that the database was restored		
18	Verify the transaction log contains this activity			
19	Perform incremental backups of the database at < time frame > intervals			
20	Dump the database			
21	Restore the database	Verify that the database was restored		
22	Using a network browser, enter open the URL for the Earth Science On-line Directory Administration and Moderation Home Page	Verify that the Earth Science On-line Directory Administration and Moderation Home Page appears"		
23	Select the “Administration” icon located at the bottom of the page			

24	Select “Create a Moderation Group”	Verify that the Create Group home page appears		
25	Enter “ Acid Rains ”			
26	Enter “ Acid Rain is deadly” in the Description field			
27	Enter “ Tester 1 ” in the Moderator field			
28	Enter “ 20 ” in the Provider ID field			
29	Enter “ 10 ” and “ 30 ” in the Application Service ids			
30	Enter “ Tester 2 ” in the ECS User name field			
31	Enter < acl password > in the ECS password field			
32	Select “Submit” located at the bottom of the page	Verify the “Polluted Water for Update” Moderation Queue home page is returned		
33	Select “Display selected request” is returned	Verify that “Moderate Data” home page is returned		
34	Review the Comments to moderator from contributor			
35	Select “accept request”	Verify that notification is returned “stating that your request was accepted		
36	Restart the system after a TBD period of time	Verify that the system has been restored, and automatic recovery is complete		

37	Perform steps 22 thru 35 again			
38	Perform manual recovery	Verify that the system has been restored, and manual recovery is complete		
39	Logon onto <server name>	Verify access entry		
40	At the command line, enter <bcp.copyout> <name of database>			
41	Enter “ isql -U{password} -P{password} <drop.schema> ” at the next sybase prompt			
42	Enter “database name” at the Sybase prompt			
43	Enter “go” at the next Sybase prompt and the return key	Accessing the selected database		
44	Enter “ sp_help ” table name			
45	Enter “go” at the next sybase prompt and the return key	This reflects the description of the database		
46	Verify that the database is emptied			
47	Enter “exit” at the sybase prompt			
48	At command line, enter <bcp.copyin> <name of database>			
49	Enter “database name” at the Sybase prompt			
50	Enter “ go ” at the next Sybase prompt and the return key			

51	Enter “ sp_help ” table name			
52	Enter “exit” at the Sybase prompt			
53	Using a network browser, enter the URL for the Earth Science On-line Directory Home Page	Verify that “Home Page appears on the screen		
54	Select the “ ESOD index ”	Verify the index home page appears		
55	Select the letter “ a ”	Verify that the data is returned		
56	Click “Set threshold” in the desktop.	Verify threshold entry appears		
57	Enter number of results to be returned by query			
58	Click on spatial search	Verify that a map appears of the world		
59	Subtract any delays not associated to server performance			
60	Delete any old queries that may still exist			
61	Perform another database query	Verify if the performance of the query has improved based on the database being cleaned-up		
62	Log-off the ECS workstation.			

5.1.4.9.5 Test Case 5: Verify Gateway 1 Functions (B231.01.05)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1.	Log on to the ECS workstation	Successful log on to ECS workstation.	IMS-0620#B, IMS-0625#B, V0-0060#B, V0-0070#B, IMS-0860#B, IMS-0870#B, IMS-0915#B, IMS-1290#B, IMS-0645#B, V0-0100#B, V0-0110#B, NOAA0300#B, IMS-0880#B, IMS-0780#B, NOAA0720#B, V0-0120#B, NOAA0330#B, NOAA0340#B, NOAA0700#B, V0-0080#B, V0-0090#B, NOAA0210#B, IMS-0140#B, IMS-1640#B, IMS-1650#B, IMS-1660#B, IMS-1665#B, IMS-1190#B, IMS-1195#B, IMS-0100#B, IMS-1620#B, IMS-1640#B, IMS-1760#B, IMS-1680#B, IMS-1690#B, IMS-1700#B	
2.	Invoke the ECS desktop	The desktop will be invoked.		
3.	Double-click on the icon for Earth Science Search Tool (ESST).	The ESST will be invoked.		

4.	Construct an inventory search request for V0 IMS server.	<p>V0 IMS successfully receive the requests from ECS.</p> <p>ECS client successfully displays the search results.</p> <p>The gateway log contains a valid entry for each request</p>		
5.	Construct an inventory search request for National Oceanic and Atmospheric Administration (NOAA) SAA.	<p>NOAA SAA successfully receive the requests from ECS.</p> <p>ECS client successfully displays the search results.</p> <p>The gateway log contains a valid entry for each request</p>		
6.	Remotely log-on to the NOAA SAA from another window on ECS workstation.	Successful log-on to NOAA SAA		

7.	Invoke the ESST GUI on NOAA SAA window and submit inventory search requests to V0 IMS server.	<p>V0 IMS successfully receive the requests from NOAA SAA.</p> <p>NOAA SAA client successfully displays the search results.</p> <p>The gateway log contains a valid entry for each request</p>		
8.	Submit browse requests to V0 IMS server.	<p>V0 IMS successfully receive the requests from ECS.</p> <p>ECS client successfully displays the results.</p> <p>The gateway log contains a valid entry for each request.</p>		

9.	Submit browse requests to NOAA SAA.	<p>NOAA SAA successfully receive the requests from ECS.</p> <p>ECS client successfully displays the results.</p> <p>The gateway log contains a valid entry for each request</p>		
10.	Remotely log-on to the V0 IMS from another window on ECS workstation.	Successful log-on to V0 IMS.		
11.	Invoke an ESST GUI on V0 IMS window and submit browse requests to ECS	<p>ECS successfully receive the requests from V0 IMS.</p> <p>ECS client successfully displays the search results.</p> <p>The gateway log contains a valid entry for each request</p>		

12.	Submit product requests to V0 IMS server.	<p>V0 IMS will successfully receive the requests from ECS.</p> <p>ECS client will successfully receive product delivery status from V0 IMS.</p> <p>The gateway log contains a valid entry for each request.</p>		
13.	Submit product requests to NOAA SAA.	<p>V0 IMS will successfully receive the requests from ECS.</p> <p>ECS client will successfully receive product delivery status from NOAA SAA.</p> <p>The gateway log contains a valid entry for each request.</p>		
14.	Invoke an appropriate GUI.	The ESST will be invoked.		

15.	Send an authentication request to NOAA SAA.	<p>NOAA SAA will successfully receive the requests from ECS.</p> <p>NOAA SAA will send the authentic information to ECS</p> <p>The gateway log contains a valid entry for each request.</p>		
16.	Construct a guide query for V0 IMS.			
17.	Submit the guide query to NOAA SAA.	<p>NOAA SAA will successfully receive the query from ECS.</p> <p>ECS will successfully receive the guide query results.</p> <p>The gateway log contains a valid entry for each request.</p>		
18.	Remotely log-on to V0 IMS from another window on ECS workstation.	Successful log-on to V0 IMS		
19.	Invoke the ESST GUI on the ECS window and construct a guide query for ECS.			

20.	Submit the guide query to ECS.	<p>V0 IMS will successfully receive the query from ECS.</p> <p>ECS will successfully receive the guide query results.</p> <p>The gateway log contains a valid entry for each request.</p>		
21	Login to a DAAC MSS Server workstation (HP) in the EDF as an administrator			
22	<p>Initialize the HP OpenView application:</p> <p>Type: cd /usr/OV/bin</p> <p>Type: ovw &</p>			
23	Double click on the “EDF” icon			
24	From the “options’ pull down menu, select <Data Collection>			
25	Enter the source. Then click the “ADD” button to add this source in the “list of collection sources”			
26	Change the “Collection Mode” to <Store, Check Threshold>			
27	Change the “Polling Interval” to <5s>			

28	Change the “Trap Number” to <xxxx> Note: the trap number must be an odd number in the range 1001 - 1999			
29	Change the values in the “Threshold” and “rearm” boxes to two greater than the number of users currently on the system.			
30	Change the “instances” to <all>			
31	Click on the <Configure Event>			
32	Click on “Event” in the Event Categories window to review the events.			
33	Enter Mailx on one of the workstations			
34	Enter: n (until desired message is read)			
35	Double click on “show data”			
36	click on “graph”			
37	In the OpenView Grapher window click on “view” and select statistics.			
38	Verify notifications of events associated with sessions			
39	Verify notifications of events associated with service requests which require additional instructions.			
40	Verify disabled asynchronous notification and provided instructions			

41	Verify acceptance of notification events			
42	Verify acceptance of instructions associated with responses to notifications of events			
43.	Enter exit on each window and log-off the ECS workstation.			

5.1.4.10 Enhanced Parameter Search Thread I (T232-10.01)

5.1.4.10.1 Test Case 1: Compose Search Request (T232-10.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that there is data in the databases to support search requests based on product specific and core metadata attributes.	The data exists.	Data.	
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type “ Inventory ”.	The type is selected.		
6	Select the core metadata attribute ‘Sensor’ and value “ AVHRR ”. Press ‘OK’.	The attribute is selected.		
7	Select the core metadata attribute ‘Platform’ and value “ NOAA10 ”.	The attribute is selected.		
8	Select the product specific attribute ‘Topic Parameter’ and value “ Cloud Coverage ”. Press ‘OK’.	The attribute is selected.		

9	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
10	Verify that the correct result set is returned.	The correct search result set is returned and displayed.	S-CLS-10010	
11	Exit the search tool.	The search tool is exited.		
12	Logoff the ECS.	The user is logged off.		

5.1.4.10.2 Test Case 2: Complex Query Search (T232-10.01.2)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that there is data in the databases to support search requests using boolean operators for geographic and non-geographic metadata.	The data exists.	Data.	
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type “ Inventory ”.	The type is selected.		
6	Select attribute ‘ Sensor ’ and values “ AVHRR ”, “ ASTER ” and “ SAR ”. Press ‘ OK ’.	The attributes are selected.		
7	Select attribute ‘Platform’ and values “ NOAA10 ”, “ AM-1 ” and “ ERS-1 ”.	The attributes are selected.		
8	Select attribute ‘Temporal’ and values “ start: 06/06/1992, end: 06/06/1993 ” and “ start: 01/01/1994, end: 01/01/1996 ”. Press ‘ OK ’.	The attributes are selected.		

9	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10130, S-CLS-10160	
10	Verify that the correct result set is returned and that it contains alpha-numeric non-geographic metadata.	The correct search result set is returned and displayed.		
11	Save the query as " query2 " and view the query to ensure boolean and logical operators were used.	The correct operators were used.		
12	Exit the search tool.	The search tool is exited.		

5.1.4.10.3 Test Case 3: Wildcard Query Construct (T232-10.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that there is data in the databases to support search requests using wildcard constructs for non-geographic metadata.	The data exists.	Data.	
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type “ Inventory ”.	The type is selected.		
6	Access the utility which allows the user to manually enter a query.	The utility is invoked.		
7	Retrieve “ query2 ”.	The query is displayed on the interactive screen.		
8	Change the part of the query for attribute Sensor from “ A V H R R ” to prefix wildcard construct “ *HRR ”.	The query is updated.		
9	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10140	

10	Verify that the correct result set is returned and that it contains alpha-numeric non-geographic metadata.	The correct search result set is returned and displayed.		
11	Return to the utility which allows the user to manually enter a query.	The utility is invoked.		
12	Retrieve “ query2 ”.	The query is displayed on the interactive screen.		
13	Change the part of the query for attribute Sensor from “ AVHRR ” to embedded wildcard construct “ *VHR* ”.	The query is updated.		
14	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10140	
15	Verify that the correct result set is returned and that it contains alpha-numeric non-geographic metadata.	The correct search result set is returned and displayed.		
16	Return to the utility which allows the user to manually enter a query.	The utility is invoked.		
17	Retrieve “ query2 ”.	The query is displayed on the interactive screen.		
18	Change the part of the query for attribute Sensor from “ AVHRR ” to suffix wildcard construct “ AVH* ”.	The query is updated.		

19	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10140	
20	Verify that the correct result set is returned and that it contains alpha-numeric non-geographic metadata.	The correct search result set is returned and displayed.		
21	Exit the search tool.	The search tool is exited.		

5.1.4.10.4 Test Case 4: Character Range Query (T232-10.01.04)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that there is data in the databases to support search requests using a character range as matching criteria for non-geographic metadata.	The data exists.	Data.	
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type “ Inventory ”.	The type is selected.		
6	Access the utility which allows the user to manually enter a query.	The utility is invoked.		
7	Retrieve “ query2 ”.	The query is displayed on the interactive screen.		
8	Change the part of the query for attribute Sensor from “ AVHRR ” to “ TOVS ” .	The query is updated.		
9	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10150	

10	Verify that the correct result set is returned and that it contains alpha-numeric non-geographic metadata.	The correct search result set is returned and displayed.		
11	Exit the search tool.	The search tool is exited.		

5.1.4.10.5 Test Case 5: Combination Search (T232-10.01.05)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Ensure that there is data in the databases to support search requests using a min/max range and combination constructs as matching criteria for non-geographic metadata.	The data exists.	Data.	
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type ‘ Inventory ’.	The type is selected.		
6	Compose a search request using a min/max range as search criteria for query of numerical non-geographic metadata.	The search request is composed.		
7	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10170	
8	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
9	Return to the default search screen.	The default search screen is displayed.		

10	Select the Search Type ' Inventory '.	The type is selected.		
11	Compose a search request using a combination of a wildcard construct and a min/max range as search criteria for query of non-geographic metadata.	The search request is composed.		
12	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10180	
13	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
14	Return to the default search screen.	The default search screen is displayed.		
15	Select the Search Type ' Inventory '.	The type is selected.		
16	Compose a search request using a combination of an exact word match and a logical operator as search criteria for query of non-geographic metadata.	The search request is composed.		
17	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10180	
18	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		

19	Return to the default search screen.	The default search screen is displayed.		
20	Select the Search Type ' Inventory '.	The type is selected.		
21	Compose a search request using a combination of an exact phrase match and a boolean operator as search criteria for query of non-geographic metadata.	The search request is composed.		
22	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10180	
23	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
24	Return to the default search screen.	The default search screen is displayed.		
25	Select the Search Type ' Inventory '.	The type is selected.		
26	Compose a search request using a combination of a character set and a character range as search criteria for query of non-geographic metadata.	The search request is composed.		
27	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10180	

28	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
29	Return to the default search screen.	The default search screen is displayed.		
30	Select the Search Type ' Inventory '.	The type is selected.		
31	Compose a search request using a combination of a wildcard construct, a character set, an exact phrase match and a logical operator as search criteria for query of non-geographic metadata.	The search request is composed.		
32	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10180	
33	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
34	Return to the default search screen.	The default search screen is displayed.		
35	Select the Search Type ' Inventory '.	The type is selected.		
36	Compose a search request using a combination of an exact word match, an exact phrase match, a character set, a wildcard construct, a character range, a logical and boolean operator and a min/max range as search criteria for query of non-geographic metadata.	The search request is composed.		

37	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10180	
38	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
39	Exit the search tool.	The search tool is exited.		

5.1.4.11 Spatial Search Thread I (T232-20.01)

5.1.4.11.1 Test Case 1: Point/Radius Search Test (T232-20.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that there is data in the databases to support search requests based on point-and-radius and point criteria.	The data exists.	Data.	
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type “ Inventory ”.	The type is selected.		
6	Select attribute ‘Sensor’ and value “ AVHRR ”. Press ‘ OK ’.	The attribute is selected.		
7	Select attribute ‘ Spatial ’.	The attribute is selected.		
8	Select shape selector ‘ Point and Radius ’.	The shape selector is selected.		
9	Use the mouse to select a point on the map and draw the radius an inch long to select the circular area.	The area is selected.		
10	Close the spatial window.	The window is closed.		

11	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10070	
12	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
13	Return to the default search screen.	The default search screen is displayed.		
14	Select the Search Type " Inventory ".	The type is selected.		
15	Select attribute 'Sensor' and value " AVHRR ". Press 'OK'.	The attribute is selected.		
16	Select attribute ' Spatial '.	The attribute is selected.		
17	Select shape selector ' Point and Radius '.	The shape selector is selected.		
18	Enter coordinates " 30,120 " and " 60,120 " as the radius for the circular area selected.	The area is selected.		
19	Close the spatial window.	The window is closed.		
20	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10070	
21	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
22	Return to the default search screen.			

23	Select the Search Type “ Inventory ”.	The type is selected.		
24	Select attribute ‘Sensor’ and value “ ASTER ”. Press ‘ OK ’.	The attribute is selected.		
25	Select attribute ‘ Spatial ’.	The attribute is selected.		
26	Select shape selector ‘Point’.	The shape selector is selected.		
27	Enter coordinate “ 50,100 ” as the point selected on the map.	The area is selected.		
28	Close the spatial window.	The window is closed.		
29	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10075	
30	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
31	Return to the default search screen.	The default screen is displayed.		
32	Select the Search Type “ Inventory ”.	The type is selected.		
33	Select attribute ‘Sensor’ and value “ MODIS ”. Press ‘ OK ’.	The attribute is selected.		
34	Select attribute ‘ Spatial ’.	The attribute is selected.		
35	Select shape selector ‘ Point ’.	The shape selector is selected.		
36	Use the mouse to select a point on the map.	The area is selected.		

37	Close the spatial window.	The window is closed.		
38	Select the ‘Submit Search’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10075	
39	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
40	Exit the search tool.	The search tool is exited.		

5.1.4.11.2 Test Case 2: Polygon Search Test (T232-20.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that there is data in the databases to support search requests based on polygonal coordinate criteria.	The data exists.	Data.	
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type “ Inventory ”.	The type is selected.		
6	Select attribute ‘Sensor’ and value “ SAGE III ”. Press ‘ OK ’.	The attribute is selected.		
7	Select attribute ‘ Spatial ’.	The attribute is selected.		
8	Select shape selector ‘ Polygon ’.	The shape selector is selected.		
9	Use the mouse to outline a four-sided shape on the map.	The area is selected.		
10	Close the spatial window.	The window is closed.		
11	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10080	

12	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
13	Exit the search tool.	The search tool is exited.		

5.1.4.11.3 Test Case 3: Geographical Metadata Query Test (T232-20.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that there is data in the databases to support search requests based on geographic names.	The data exists.	Data.	
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type “ Inventory ”.	The type is selected.		
6	Select attribute ‘Sensor’ and value “ AVHRR ”. Press ‘ OK ’.	The attribute is selected.		
7	Select attribute ‘Parameter’ and value “ NOVI ” for query of geographic metadata by geographic name.	The attribute is selected.		
8	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10090	
9	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
10	Exit the search tool.	The search tool is exited.		

5.1.4.11.4 Test Case 4: Simple and Complex Inventory Search (T232-20.01.04)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that there is data in the databases to support inventory search requests based on inventory core and product specific metadata attributes.	The data exists.	Data.	
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type “ Inventory ”.	The type is selected.		
6	Select the core metadata attribute ‘Sensor’ and value “ AVHRR ”. Press ‘OK’.	The attribute is selected.		
7	Select the core metadata attribute ‘Platform’ and value “ NOAA10 ”.	The attribute is selected.		
8	Select the product specific attribute ‘Topic Parameter’ and value “ Cloud Coverage ”. Press ‘OK’.	The attribute is selected.		
9	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		

10	Verify that the correct result set is returned.	The correct search result set is returned and displayed.	S-CLS-10930	
11	Return to default search screen.	The default screen is displayed.		
12	Select attribute 'Sensor' and values "AVHRR". Press 'OK'.	The attributes are selected.		
13	Select attribute 'Platform' and value "NOAA10".	The attributes are selected.		
14	Select attribute 'Temporal' and values "start: 06/06/1992, end: 06/06/1993" and "start: 01/01/1994, end: 01/01/1996". Press 'OK'.	The attributes are selected.		
15	Select the 'Submit Search' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10930	
16	Return to default search screen.	The default screen is displayed.		
17	Select the Search Type "Inventory".	The type is selected.		
18	Select the core metadata attribute 'Sensor' and value "AVHRR". Press 'OK'.	The attribute is selected.		
19	Select the core metadata attribute 'Platform' and value "NOAA10".	The attribute is selected.		
20	Select attribute 'Spatial'.	The attribute is selected.		
21	Select shape selector 'Point and Radius'.	The shape selector is selected.		

22	Use the mouse to select a point on the map and draw the radius an inch long to select the circular area.	The area is selected.		
23	Close the spatial window.	The window is closed.		
24	Select attribute ' Temporal ' and values " start: 06/06/1992, end: 06/06/1993 " and " start: 01/01/1994, end: 01/01/1996 ". Press ' OK '.	The attributes are selected.		
25	Select the product specific attribute 'Topic Parameter' and value " Cloud Coverage ". Press ' OK '.	The attribute is selected.		
26	Select processing level " 1 ".	The processing level is selected.		
27	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-10930	
28	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
29	Exit the search tool.	The search tool is exited.		

5.1.4.11.5 Test Case 5: Global Granule Search (T232-20.01.05)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that there is data in the databases to support inventory search requests based on inventory core and product specific metadata attributes.	The data exists.	Data.	
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type “ Inventory ”.	The type is selected.		
6	Select the core metadata attribute ‘Sensor’ and value “ AVHRR ”. Press ‘ OK ’.	The attribute is selected.		
7	Select the core metadata attribute ‘Platform’ and value “ NOAA10 ”.	The attribute is selected.		
8	Select the product specific attribute ‘Topic Parameter’ and value “ Cloud Coverage ”. Press ‘ OK ’.	The attribute is selected.		
9	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		

10	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
11	Save the results as “ result1 ”.	The results are saved.		
12	Return to the default search screen.	The default screen is displayed.		
13	Perform the search again using ASTER as the Sensor.	The search is performed.		
14	Save the results as “ result2 ”.	The results are saved.		
15	Return to the default search screen.	The default screen is displayed.		
16	Perform the search again using MODIS as the Sensor.	The search is performed.		
17	Save the results as “ result3 ”.	The results are saved.		
18	Select data granules from those saved results.	The data granules are selected.	S-CLS-13540	
19	Submit a single data request (order) for these data granules.	The request is submitted and a message indicating submittal is displayed.	S-CLS-13540	
20	Perform a search for global granules using the mapping tool.	The search is performed and the results are returned.	S-CLS-15940	
21	Exit the search tool.	The search tool is exited.		

5.1.4.11.6 Test Case 6: Phenomenological Search Criteria (T232-20.01.06)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that there is data in the databases to support ECS holdings searches using phenomenological search criteria.	The data exists.	Data.	
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type “ Inventory ”.	The type is selected.		
6	Compose a search of ECS holdings using phenomenological search criteria for attributes supported by Data Server schema.	The search request is composed.		
7	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-13560	
8	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		

9	Compose a search. Relate phenomenological search criteria to search criteria containing values for searchable attributes supported in the Data Server Schema for this search using the Data Dictionary tool.			
10	Verify that the correct result set is returned.	The correct search result set is returned and displayed.	S-CLS-14570, S-DMS-20920	
11	Exit the search tool.	The search tool is exited.		

5.1.4.11.7 Test Case 7: Latitude/Longitude Search (T232-20.01.07)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	Ensure that there is data in the appropriate database to support lat/lon selection criteria used to display resulting selection areas.	The data exists.	Data.	
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type “ Inventory ”.	The type is selected.		
6	Select attribute ‘Sensor’ and value “ AVHRR ”. Press ‘ OK ’.	The attribute is selected.		
7	Select attribute ‘ Spatial ’.	The attribute is selected.		
8	Select shape selector ‘Rectangle’.	The shape selector is selected.		
9	Enter coordinates “ 30,120 ”, “ 30,150 ”, “ 60,120 ” and “ 60,150 ” as the lat/lon selection criteria for the area selected.	The area is selected.		
10	Close the spatial window.	The window is closed.		

11	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.	S-CLS-13990	
12	Verify that the correct result set is returned and the appropriate selection area is displayed on the map.	The correct search result set is returned and displayed on the map.		
13	Exit the search tool.	The search tool is exited.		

5.1.4.12 Search Services I (B232.01)

5.1.4.12.1 Test Case 1: Verify Parameter Searches I (B232.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that there is data in the databases to support search requests based on product specific and core metadata attributes.	The data exists.		
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type “ Inventory ”.	The type is selected.		
6	Select the core metadata attribute ‘Sensor’ and value “ AVHRR ”. Press ‘ OK ’.	The attribute is selected.		
7	Select the core metadata attribute ‘ Platform ’ and value “ NOAA10 ”.	The attribute is selected.		
8	Select the product specific attribute ‘Topic Parameter’ and value “ Cloud Coverage ”. Press ‘ OK ’.	The attribute is selected.		

9	Select the 'Submit Search' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
10	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
11	Access the Desktop by typing "EcsDesktop" at the command line.	The desktop is displayed.		
12	Invoke the ESST from the Desktop.	The search tool is displayed.		
13	Select the Search Type "Inventory" .	The type is selected.		
14	Select attribute 'Sensor' and values "AVHRR" , "Instrument 2" and "Instrument 3" . Press 'OK' .	The attributes are selected.		
15	Select attribute 'Platform' and values "NOAA10" , "NOAA11" and "NOAA9" .	The attributes are selected.		
16	Select attribute 'Temporal' and values "start: 06/06/1992, end: 06/06/1993" and "start: 01/01/1994, end: 01/01/1996" . Press 'OK' .	The attributes are selected.		
17	Select the 'Submit Search' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		

18	Verify that the correct result set is returned and that it contains alpha-numeric non-geographic metadata.	The correct search result set is returned and displayed.		
19	Save the query as “ query2 ” and view the query to ensure boolean and logical operators were used.	The correct operators were used.		
20	Select the Search Type ‘ Inventory ’.	The type is selected.		
21	Access the utility which allows the user to manually enter a query.	The utility is invoked.		
22	Retrieve “ query2 ”.	The query is displayed on the interactive screen.		
23	Change the part of the query for attribute Sensor from “ A V H R R ” to prefix wildcard construct “ *H R R ”.	The query is updated.		
24	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
25	Verify that the correct result set is returned and that it contains alpha-numeric non-geographic metadata.	The correct search result set is returned and displayed.		
26	Return to the utility which allows the user to manually enter a query.	The utility is invoked.		

27	Retrieve “ query2 ”.	The query is displayed on the interactive screen.		
28	Change the part of the query for attribute Sensor from “ AVHRR ” to embedded wildcard construct “ *VHR* ”.	The query is updated.		
29	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
30	Verify that the correct result set is returned and that it contains alpha-numeric non-geographic metadata.	The correct search result set is returned and displayed.		
31	Return to the utility which allows the user to manually enter a query.	The utility is invoked.		
32	Retrieve “ query2 ”.	The query is displayed on the interactive screen.		
33	Change the part of the query for attribute Sensor from “ AVHRR ” to suffix wildcard construct “ AVH* ”.	The query is updated.		
34	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		

35	Verify that the correct result set is returned and that it contains alpha-numeric non-geographic metadata.	The correct search result set is returned and displayed.		
36	Exit the search tool.	The search tool is exited.		
37	Select the Search Type ' Inventory '.	The type is selected.		
38	Access the utility which allows the user to manually enter a query.	The utility is invoked.		
39	Retrieve " query2 ".	The query is displayed on the interactive screen.		
40	Change the part of the query for attribute Sensor from " AVHRR " to " TOVS ".	The query is updated.		
41	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
42	Verify that the correct result set is returned and that it contains alpha-numeric non-geographic metadata.	The correct search result set is returned and displayed.		
43	Select the Search Type ' Inventory '.	The type is selected.		
44	Compose a search request using a min/max range as search criteria for query of numerical non-geographic metadata.	The search request is composed.		

45	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
46	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
47	Return to the default search screen.	The default search screen is displayed.		
48	Select the Search Type ' Inventory '.	The type is selected.		
49	Compose a search request using a combination of a wildcard construct and a min/max range as search criteria for query of non-geographic metadata.	The search request is composed.		
50	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
51	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
52	Return to the default search screen.	The default search screen is displayed.		
53	Select the Search Type ' Inventory '.	The type is selected.		

54	Compose a search request using a combination of an exact word match and a logical operator as search criteria for query of non-geographic metadata.	The search request is composed.		
55	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
56	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
57	Return to the default search screen.	The default search screen is displayed.		
58	Select the Search Type ' Inventory '.	The type is selected.		
59	Compose a search request using a combination of an exact phrase match and a boolean operator as search criteria for query of non-geographic metadata.	The search request is composed.		
60	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
61	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
62	Return to the default search screen.	The default search screen is displayed.		

63	Select the Search Type ' Inventory '.	The type is selected.		
64	Compose a search request using a combination of a character set and a character range as search criteria for query of non-geographic metadata.	The search request is composed.		
65	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
66	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
67	Return to the default search screen.	The default search screen is displayed.		
68	Select the Search Type ' Inventory '.	The type is selected.		
69	Compose a search request using a combination of a wildcard construct, a character set, an exact phrase match and a logical operator as search criteria for query of non-geographic metadata.	The search request is composed.		
70	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
71	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		

72	Return to the default search screen.	The default search screen is displayed.		
73	Select the Search Type ' Inventory '.	The type is selected.		
74	Compose a search request using a combination of an exact word match, an exact phrase match, a character set, a wildcard construct, a character range, a logical and boolean operator and a min/max range as search criteria for query of non-geographic metadata.	The search request is composed.		
75	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
76	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
77	Exit the search tool.	The search tool is exited.		

5.1.4.12.2 Test Case 2: Verify Spatial Search I (B232.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Ensure that there is data in the databases to support search requests based on point-and-radius and point criteria.	The data exists.		
2	Logon to the ECS.	The user is logged on.		
3	Access the Desktop by typing “ EcsDesktop ” at the command line.	The desktop is displayed.		
4	Invoke the ESST from the Desktop.	The search tool is displayed.		
5	Select the Search Type “ Inventory ”.	The type is selected.		
6	Select attribute ‘Sensor’ and value “ AVHRR ”. Press ‘OK’.	The attribute is selected.		
7	Select attribute ‘ Spatial ’.	The attribute is selected.		
8	Select shape selector ‘ Point and Radius ’.	The shape selector is selected.		
9	Use the mouse to select a point in the United States and draw the radius an inch long to select the circular area.	The area is selected.		
10	Close the spatial window.	The window is closed.		

11	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
12	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
13	Return to the default search screen.	The default search screen is displayed.		
14	Select the Search Type " Inventory ".	The type is selected.		
15	Select attribute 'Sensor' and value " AVHRR ". Press ' OK '.	The attribute is selected.		
16	Select attribute ' Spatial '.	The attribute is selected.		
17	Select shape selector ' Point and Radius '.	The shape selector is selected.		
18	Enter coordinates " 30,120 " and " 60,120 " as the radius for the circular area selected.	The area is selected.		
19	Close the spatial window.	The window is closed.		
20	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
21	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
22	Return to the default search screen.			

23	Select the Search Type “Inventory” .	The type is selected.		
24	Select attribute ‘Sensor’ and value “AVHRR” . Press ‘OK’.	The attribute is selected.		
25	Select attribute ‘Spatial’ .	The attribute is selected.		
26	Select shape selector ‘Point’ .	The shape selector is selected.		
27	Enter coordinate “50,100” as the point selected on the map.	The area is selected.		
28	Close the spatial window.	The window is closed.		
29	Select the ‘Submit Search’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
30	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
31	Return to the default search screen.	The default screen is displayed.		
32	Select the Search Type “Inventory” .	The type is selected.		
33	Select attribute ‘Sensor’ and value “AVHRR” . Press ‘OK’.	The attribute is selected.		
34	Select attribute ‘Spatial’ .	The attribute is selected.		
35	Select shape selector ‘Point’ .	The shape selector is selected.		

36	Use the mouse to select a point in the United States to select the area on the map.	The area is selected.		
37	Close the spatial window.	The window is closed.		
38	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
39	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
40	Select the Search Type " Inventory ".	The type is selected.		
41	Select attribute 'Sensor' and value " AVHRR ". Press ' OK '.	The attribute is selected.		
42	Select attribute ' Spatial '.	The attribute is selected.		
43	Select shape selector ' Polygon '.	The shape selector is selected.		
44	Use the mouse to select a point in the United States and draw a four-sided shape to select the area.	The area is selected.		
45	Close the spatial window.	The window is closed.		
46	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		

47	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
48	Select the Search Type “ Inventory ”.	The type is selected.		
49	Select attribute ‘Sensor’ and value “ AVHRR ”. Press ‘ OK ’.	The attribute is selected.		
50	Select attribute ‘Parameter’ and value “ NOVI ” for query of geographic metadata by geographic name.	The attribute is selected.		
51	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
52	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
53	Select the Search Type “ Inventory ”.	The type is selected.		
54	Compose an inventory search based on a combination of the inventory core metadata attributes and inventory product specific metadata attributes.	The search request is composed.		
55	Select the ‘ Submit Search ’ button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		

56	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
57	Select the Search Type “ Inventory ”.	The type is selected.		
58	Compose and submit an inventory search.	The search request is submitted and a message is displayed indicating the submittal.		
59	Save the results.	The results are saved.		
60	Repeat the previous three steps.	The results are saved.		
61	Repeat those same three steps.	The results are saved.		
62	Select data granules from those saved results.	The data granules are selected.		
63	Submit a single data request for these data granules.	The request is submitted and a message indicating submittal is displayed.		
64	Perform a search for global granules using the mapping tool.	The search is performed and the results are returned.		
65	Select the Search Type “ Inventory ”.	The type is selected.		
66	Compose a search of ECS holdings using phenomenological search criteria for attributes supported by Data Server schema.	The search request is composed.		

67	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
68	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
69	Compose a search. Relate phenomenological search criteria to search criteria containing values for searchable attributes supported in the Data Server Schema for this search using the Data Dictionary tool.			
70	Verify that the correct result set is returned.	The correct search result set is returned and displayed.		
71	Select the Search Type " Inventory ".	The type is selected.		
72	Select attribute 'Sensor' and value " AVHRR ". Press ' OK '.	The attribute is selected.		
73	Select attribute ' Spatial '.	The attribute is selected.		
74	Select shape selector ' Rectangle '.	The shape selector is selected.		
75	Enter coordinates " 30,120 ", " 30,150 ", " 60,120 " and " 60,150 " as the lat/lon selection criteria for the area selected.	The area is selected.		
76	Close the spatial window.	The window is closed.		

77	Select the ' Submit Search ' button.	The search request is submitted and the results are displayed on the results screen which shows the collection data, granule data, attribute selection and available services.		
78	Verify that the correct result set is returned and the appropriate selection area is displayed on the map.	The correct search result set is returned and displayed on the map.		
79	Exit the search tool.	The search tool is exited.		

5.1.5 Planning and Data Processing Subsystems

5.1.5.1 Processing Request Thread IA (T233-11.01)

5.1.5.1.1 Test Case 1: Incorporate Software (T233-11.01.01)

Test procedure not ready.

5.1.5.1.2 Test Case 2: Prong HMI Function (T233-11.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Initiate the test driver from the command line on the unix machine	Interacts with ECS APIs which initializes AutoSys (PRONG COTS)		
2	Display Autosys menu	AutoSys Screen is displayed		
3	Select an Action from the Actions panel	Will verify that the driver is interacting with ECS API and AutoSys		

5.1.5.1.3 Test Case 3: Determine Computing Resources (T233-11.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Logon to AIT GUI			
2	Select UTILITY menu	Provides the view of PGE profiles in the PDPS database		
3	Start executing the chain of PGE's from the PGE GUI	Initializes the execution process		
4	Start the AI&T staff script			
5	Select PGE Profile Report	The report screen is displayed		
6	Display the PGE Profile Report with the current utilization of computing resources by the chain of PGE's	The report reflects the total computing resources used.		
7	Verify the information returned view the PDPS database	Should have computer resource utilization information.		

5.1.5.1.4 Test Case 4: Continuous Operation (T233-11.01.04) -

Uses Rel. A Test Procedure.

5.1.5.2 Processing Request Thread IB (T233-12.01)

5.1.5.2.1 Test Case 1: AITTL Conformance (T233-12.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Logon to the Processing Workstation	Starts up the system		
2	Bring up the AITTL screen	Displays the AITTL GUIs		
3	Select the add Button	Should allow the user to add		
4	Select the delete Button	Should allow the user to delete		
5	Select update and enter update information	The screen will display updated information		
6	Compare the GUI selection to the ECS User Interface Style Guide checklist	The selected GUI should match the checklist		
7	Select a new GUI	The selected GUI should appear on the screen		
8	Repeat Step 3 - 7 until all GUIs have been selected and verified	The selected GUI should match the checklist		
9	Maximize the screen	Resizes to a larger screen		
10	Minimize the screen	Resizes to a smaller screen		
11	Return screen to normal size	Returns the screen to original sizing		
12	Select help button	Help screen will be displayed		

13	Close the window	Window will close and display the original window		
14	Open all highlight ed icons	Displays selected icon associated information		
15	Select all tabloids	Pages to the next screen		

5.1.5.2.2 Test Case 2: Granule Size (T233-12.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Select the Production Planning Workbench GUI	The Production Planning Workbench is initiated		
2	Select Data Processing Request tab	Data Processing Request GUI is displayed		
3	Invoke a data processing request	Triggers PGE execution which generates input and output granules		
4	Invoke DAAC non-science QA	QA checks the granule sizes and the results are saved as metadata		
5	Retrieve the pre-defined granule sizes	To aid values assigning granules values outside of the pre-defined range, large and small		
6	Enter input and output granules of various sizes. (Assign some of the granules values outside of the pre-defined range, large and small)	Setting up the system to generate notifications		
7	Repeat steps 4 & 5			
8	Retrieve the notifications indicating that the input and output granules outside of the pre-defined range of values have been detected.			
9	Verify the sizes against values in the PGE Profile.			

5.1.5.2.3 Test Case 3: Assess Quality of Onboard Orbit & Attitude Data (T233-12.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Initiate the Prong Data Pre-processing driver	Driver simulates PDPS Data Preprocessing		
2	Retrieve EOS-AM spacecraft ancillary data	Data contains missing and erroneous data		
3	Initiate preprocessing	Computes orbit metadata from L0		
4	Initiate the quality monitor gui			
5	Initiate quality checking on the onboard orbit & attitude data produced from processing the spacecraft ancillary data	Reports on the quality of the onboard orbit & attitude data produced from processing the spacecraft ancillary data		

5.1.5.2.4 Test Case 4: Provide Data to SDP Toolkit (T233-12.01.04)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Bring up the necessary processing hardware.	The processing hardware is brought up.		
2	Copy the preprocessing input file(s) to the correct location.	The necessary input files will be provided to the Preprocessing DPR.		
3	Initiate the Preprocessing DPR on a dataset that does not contain any errors.	The processing request is initiated.		
4	Check the directory where the output files should be located.	The preprocessing output files are in their correct location.		
5	Using the provided test driver, display the result files.	The files are displayed.		

6	Inspect the file that contains the information in the native format of the host hardware.	<p>The output file contains the following information:</p> <ol style="list-style-type: none"> 1. Ephemeris files which will include metadata containing time range, orbit number range, and platform. 2. Orbit and attitude data including platform position and velocity vectors and platform attitude/attitude rate. 3. EDOS-generated LO PDS as header and quality parameters, header information, quality information. 4. EDOS-generated LO header. 5. Metadata information to include: Start/end times, number of files staged, APID of each data file, orbit number of the staged data file. 		
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7	Inspect the file that contains the information in HDF-EOS format.	<p>The output file contains the following information:</p> <ol style="list-style-type: none"> 1. Ephemeris files which will include metadata containing time range, orbit number range, and platform. 2. Orbit and attitude data including platform position and velocity vectors and platform attitude/attitude rate. 3. EDOS-generated LO PDS as header and quality parameters, header information, quality information. 4. Metadata information to include: Start/end times, number of files staged, APID of each data file, orbit number of the staged data file. 		
8	Repeat steps 1-7 for each platform supported.			

5.1.5.2.5 Test Case 5: Core Metadata Values (T233-12.01.05)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Bring up the PRONG Hardware.	The specified processing hardware is brought up.		
2	Copy the Process Control File and the Metadata Configuration File to their proper location (if they are not already there).	The files are copied to their proper location.		
3	Inspect the PDPS database to verify that the correct keywords and ranges are present. (These values are used to compare to the metadata within the test driver).	The correct keywords and ranges are in the database.		
4	Initiate the PGE QA checking against the output metadata by initiating a test driver created for this purpose. This portion of the test will only check for keywords.	The PGE QA will check the keywords specified in the PDPS database against the Core Metadata Values in the test driver metadata to assure the values are the same. This output data will not be flagged as the keywords will match.		
5	Alter the keywords in the PDPS database so the QA fails.	The PDPS database is updated to include the new information.		

6	Initiate the PGE QA checking against the output metadata using the same test driver. This portion of the test will only check for keywords.	The PGE QA will check the keywords specified in the PDPS database against the Core Metadata Values in the test driver metadata to assure the values are the same. This output data will be flagged as the keywords will not match.		
7	Initiate the PGE QA checking against the output metadata using the same test driver. This portion of the test will only check for ranges.	The PGE QA will check the ranges specified in the PDPS database against the Core Metadata Values in the test driver metadata to assure the values are the same. This output data will not be flagged as the metadata values will be within the specified range.		
8	Alter the predefined range of values so the output granule metadata is not included.	The PDPS database is updated to include the new information.		
9	Initiate the PGE QA checking against the output metadata using the same test driver. This portion of the test will only check for ranges.	The PGE QA will check the ranges specified in the PDPS database against the Core Metadata Values in the test driver metadata to assure the values are the same. This output data will be flagged as the ranges will not match.		
10	Repeat for a sampling of core metadata values.			

5.1.5.2.6 Test Case 6: Product Specific Metadata Values (T233-12.01.06)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	Bring up the PRONG Hardware.	The specified processing hardware is brought up.		
2	Copy the Process Control File and the Metadata Configuration File to their proper location (if they are not already there).	The files are copied to their proper location.		
3	Inspect the PDPS database to verify that the correct keywords and ranges are present. (These values are used to compare to the metadata within the test driver).	The correct keywords and ranges are in the database.		
4	Initiate the PGE QA checking against the output metadata by initiating a test driver created for this purpose. This portion of the test will only check for keywords.	The PGE QA will check the keywords specified in the PDPS database against the Product Specific Metadata Values in the test driver metadata to assure the values are the same. This output data will not be flagged as the keywords will match.		
5	Alter the keywords in the PDPS database so the QA fails.	The PDPS database is updated to include the new information.		

6	Initiate the PGE QA checking against the output metadata using the same test driver. This portion of the test will only check for keywords.	The PGE QA will check the keywords specified in the PDPS database against the Product Specific Metadata Values in the test driver metadata to assure the values are the same. This output data will be flagged as the keywords will not match.		
7	Initiate the PGE QA checking against the output metadata using the same test driver. This portion of the test will only check for ranges.	The PGE QA will check the ranges specified in the PDPS database against the Product Specific Metadata Values in the test driver metadata to assure the values are the same. This output data will not be flagged as the metadata values will be within the specified range.		
8	Alter the predefined range of values so the output granule metadata is not included.	The PDPS database is updated to include the new information.		
9	Initiate the PGE QA checking against the output metadata using the same test driver. This portion of the test will only check for ranges.	The PGE QA will check the ranges specified in the PDPS database against the Product Specific Metadata Values in the test driver metadata to assure the values are the same. This output data will be flagged as the ranges will not match.		
10	Repeat for a sampling of product specific metadata values.			

5.1.5.3 Enhanced Production Plan Thread I (T233-20.01)

5.1.5.3.1 Test Case 1: Candidate Plans (T233-20.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Initiate the Production Request Editor.	The Production Request Editor is invoked.		
2	Retrieve several existing Data Availability Schedules (DAS).	DASs are retrieved.		
3	Initiate the Production Planning Workbench.	The Production Planning Workbench is initiated.		
4	Create a number of reprocessing requests and on-demand processing requests that do not exceed the thresholds.	Processing requests are created.		
5	Initiate the creation of a candidate plan.	A candidate plan is created and displayed.		
6	Create a number of on-demand processing requests that exceed the thresholds.	On-demand processing requests are created.		
7	Initiate the creation of a candidate plan.	A candidate plan is created and displayed. The candidate plan includes the on-demand processing requests that exceeded the thresholds.		

5.1.5.3.2 Test Case 2: On-Demand Production Requests (T233-20.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/ Fail
1	Bring up the Production Planning Workbench.	The Production Planning Workbench is initiated.		
2	Set the on-demand processing threshold to a “normal” setting.	The on-demand processing threshold is set to the specified setting.		
3	Bring up the Production Request Editor.	The Production Request Editor is invoked.		
4	Enter various on-demand processing requests that are invalid.	The processing requests are rejected and a message is sent to the data server indicating the reason for the rejection.		
5	Enter various on-demand processing requests that do not exceed the on-demand threshold.	The on-demand production requests are accepted and a message indicating that acceptance is sent to the data server.		
6	Enter various on-demand processing requests which exceed the on-demand thresholds.	The production requests are deferred. A message is sent to the data server indicating that each production request exceeded thresholds and is deferred. For each production request, a message is sent to the operations staff indicating that a production request was deferred.		
7	Initiate the creation of a candidate plan which will include all the deferred on-demand processing requests.	A candidate plan is created and includes all the deferred on-demand processing requests. The candidate plan will be displayed automatically.		

8	Submit valid updates to some of the on-demand processing requests.	The on-demand processing requests are updated. Response messages are sent to the data server indicating that the update was accepted.		
9	Submit invalid updates to some of the on-demand processing requests.	The on-demand processing requests are not updated. A response message is sent to the data server indicating that the update was not accepted.		
10	Inspect the Autosys logs.	The production requests that were valid and did not exceed on-demand thresholds (if on-demand processing request) are accurately reflected in the Autosys logs.		
11	Inspect the Driver which was used to capture the messages sent from Planning to data server.	The Driver accurately reflects the proper error messages and acceptance messages.		

5.1.5.3.3 Test Case 3: Maintain and Update Multiple Production Strategies (T233-20.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Logon to the planning workstation			
2	Bring up the Planning Workbench GUI	Displays Planning Workbench GUI screen		
3	Select Production Strategies Tab	Will bring up the production Strategies Window		
4	Select File New from main menu	Displays blank entry fields		
5	Enter Strategy Name, Aging Delta, InterDAAC Delta, and value/priority, weight/ Default pairs for each of (PR Type, User Type, and PGE	Displays newly entered data		
6	Save new strategy	Saves the new information and creates a new strategy		
7	Repeat step 5 and 6 ten times to create multiple strategies.	Multiple strategies are created		
8	In the Options menu select create Candidate plan	Candidate plan is generated		
9	Select a strategy from the main menu	Pop-up menu is displayed		
10	Select a strategy name in the pop-up menu			
11	Modify the strategy and save	Saves the strategy		
12	Repeat steps 8 - 10			

13	In the Options menu select display Candidate plan	Candidate plan is displayed		
14	Select a strategy from the main menu	Pop-up menu is displayed		
15	Select a strategy name in the pop-up menu			
16	Select Delete production strategy	Confirmation window is displayed		
17	Select Delete again in the confirmation window			
18	In the Options menu select create Candidate plan	Candidate plan does not contain the deleted production strategy		

5.1.5.4 Enhanced Production Management Thread IA (T233-31.01)

5.1.5.4.1 Test Case 1: Quality Assurance Data Checks (T233-31.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	From the desktop invoke ESST	ESST displayed		
2 3	Select the Production Planning Workbench GUI	The Production Planning Workbench is initiated.		
4	Select the Subscriptions tab	The Subscription Manager is displayed		
5	Select specified Subscriptions			
6	Enter conditions to QA data	Condition entered		
7	Submit Subscription	Run a query on the pdps database for input data		
8	Display messages	Displays all input data including data waiting for quality assurance information.		
9	Note QA timeout periods			
10	Set a short QA timeout period	Sets the timeout period		
11	Run a query on the pdps database for input data	Displays all data with expired QA timeout periods.		

5.1.5.5 Enhanced Production Management Thread IB (T233-32.01)

5.1.5.5.1 Test Case 1: Display Conform to Style Guide (T233-32.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	Logon to the Production Planning Workstation	Starts up the system		
2	Bring up the planning screen	Displays the planning GUIs		
3	Select the add Button	Should allow the user to add		
4	Select the delete Button	Should allow the user to delete		
5	Select update and enter update information	The screen will display updated information		
6	Compare the GUI selection to the ECS User Interface Style Guide checklist	The selected GUI should match the checklist		
7	Select a new GUI	The selected GUI should appear on the screen		
8	Repeat Step 3 - 7 until all GUIs have been selected and verified	The selected GUI should match the checklist		
9	Maximize the screen	Resizes to a larger screen		
10	Minimize the screen	Resizes to a smaller screen		
11	Return screen to normal size	Returns the screen to original sizing		
12	Select help button	Help screen will be displayed		

13	Close the window	Window will close and display the original window		
14	Open all highlighted icons	Displays selected icon associated information		
15	Select all tabloids	Pages to the next screen		

5.1.5.5.2 Test Case 2: Notify Data Server of PGE Status (T233-32.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	Logon to the planning workstation	Used to monitor, suspend, resume and cancel messages		
2	Logon to the simulated Dataserver “Workstation”	Used to simulate the originating dataserver		
3	Display “Workstation” IP address or URL for identification	Messages will be sent to this address		
4	Initiate a production request from the production request editor located on the dataserver	The request and dataserver address will be displayed on the planning workbench screen		
5	Check the status of the production request on the originating dataserver screen.	Status will show request received		
6	Suspend the production request from the planning workbench	The request will be suspended and a message will be sent to the dataserver		
7	Check the status of the production request on the originating dataserver screen.	Status will show request suspended		
8	Resume the production request from the planning workbench	The request will be resumed and a message will be sent to the dataserver		
9	Check the status of the production request on the originating dataserver screen.	Status will show request resumed		
10	Cancel the production request from the planning workbench	The request will be cancelled and a message will be sent to the dataserver		

11	Check the status of the production request on the originating dataserver screen.	Status will show request cancelled		
12	Initiate another production request from the planning workbench	The production request will run until completion		
13	Check the status of the production request on the originating dataserver screen.	Status will show request received and completed		

5.1.5.6 Planning and Processing I (B233.01)

5.1.5.6.1 Test Case 1: On Demand Processing Requests (B233.01.01)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Bring up the Production Request Editor.	The Production Request Editor is invoked.		
2	Enter several on-demand processing requests which exceed the on-demand thresholds.	The production requests are deferred. A message is sent to the data server indicating that each production request exceeded thresholds and is deferred. For each production request, a message is sent to the operations staff indicating that a production request was deferred and replan notifications are received for each on-demand production request deferred.		
3	From the operator console validate messages received indicating that a production request was deferred and replan notifications are received for each on-demand production request deferred.	Messages are displayed.		

5.1.5.6.2 Test Case 2: Data Preprocessing (B233.01.02)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass /Fail
1	Initiate the Prong Data Pre-processing driver	Driver simulates PDPS Data Preprocessing		
2	Retrieve EOS-AM spacecraft ancillary data	Data contains missing and erroneous data		
3	Initiate preprocessing	Computes orbit metadata from L0		
4	Initiate the quality monitor gui			
5	Initiate quality checking on the onboard orbit & attitude data produced from processing the spacecraft ancillary data	Reports on the quality of the onboard orbit & attitude data produced from processing the spacecraft ancillary data		
6	Copy the preprocessing input file(s) to the correct location.	The necessary input files will be provided to the Preprocessing DPR.		
7	Initiate the Preprocessing DPR on a dataset that does not contain any errors.	The processing request is initiated.		
8	Check the directory where the output files should be located.	The preprocessing output files are in their correct location.		
9	Using the provided test driver, display the result files.	The files are displayed.		

10	Inspect the file that contains the information in the native format of the host hardware.	<p>The output file contains the following information:</p> <ol style="list-style-type: none"> 1. Ephemeris files which will include metadata containing time range, orbit number range, and platform. 2. Orbit and attitude data including platform position and velocity vectors and platform attitude/attitude rate. 3. EDOS-generated LO PDS as header and quality parameters, header information, quality information. 4. EDOS-generated LO header. 5. Metadata information to include: Start/end times, number of files staged, APID of each data file, orbit number of the staged data file. 		
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11	Inspect the file that contains the information in HDF-EOS format.	<p>The output file contains the following information:</p> <ol style="list-style-type: none"> 1. Ephemeris files which will include metadata containing time range, orbit number range, and platform. 2. Orbit and attitude data including platform position and velocity vectors and platform attitude/attitude rate. 3. EDOS-generated LO PDS as header and quality parameters, header information, quality information. 4. Metadata information to include: Start/end times, number of files staged, APID of each data file, orbit number of the staged data file. 		
12	Repeat steps 6-11 for each platform supported.			

5.1.5.6.3 Test Case 3: Warning Messages (B233.01.03)

Step No.	Test Steps	Expected Results	Observations/Comments	Pass/Fail
1	Set several On-Demand Processing requests timers values to various times	Some of the requests will finish on time and some will finish after the first timer has expired but prior to the second, and some will finish after both timers have expired.		
2	Inspect the Autosys Screen.	The Autosys screen will contain error messages.		